APPENDIX B AIR QUALITY DATA

CONSTRUCTION EMISSIONS ESTIMATES
SITE EXCAVATION AND GRADING PHASE

Project Number: 10261-00
Project Name: Pacific City

Construction Equipment Emissions
Emissions = A x B x C

	A	B	C									
		Hours/	Emission Factors in Pounds per Hour[1]					Emissions in Pounds per Day				
Equipment Type	Quantity	Day	CO	VOC	NOx	SOx	PM_{10}	CO	VOC	NOx	SOx	PM_{10}
Generator Sets	0	2	1.479	0.054	0.002	0.0006	0.00025	-	-	-	-	-
Fork Lift - 50 Hp	0	5	0.18	0.053	0.441	0	0.031	-	-	-	-	-
Fork Lift - 175 Hp	0	5	0.52	0.17	1.54	0	0.93	-	-	-	-	-
Water Truck	3	2	1.8	0.19	4.17	0.45	0.26	10.8	1.1	25.0	2.7	1.6
Tracked Loader	3	6	0.201	0.095	0.83	0.076	0.059	3.6	1.7	14.9	1.4	1.1
Tracked Tractor	2	6	0.35	0.12	1.26	0.14	0.112	4.2	1.4	15.1	1.7	1.3
Scraper	6	7	1.25	0.27	3.84	0.46	0.41	52.5	11.3	161.3	19.3	17.2
Wheeled Dozer	3	5	0.572	0.12	0.713	0.35	0.165	8.6	1.8	10.7	5.3	2.5
Wheeled Loader	0	5	0.572	0.23	1.9	0.182	0.17	-	-	-	-	-
Wheeled Tractor	0	6	3.58	0.18	1.27	0.09	0.14	-	-	-	-	-
Roller	2	6	0.3	0.065	0.87	0.067	0.05	3.6	0.8	10.4	0.8	0.6
Motor Grader	4	6	0.151	0.039	0.713	0.086	0.061	3.6	0.9	17.1	2.1	1.5
Miscellaneous	0	6	0.675	0.15	1.7	0.143	0.14	-	-	-	-	-
Subtotal								86.9	19.1	254.6	33.2	25.7

[1] Emission Factors from SCAQMD CEQA Air Quality Handbook (1993), Tables A9-8-A, A9-8-B, A9-8-C, and A9-8-D.

On-Road Vehicle Source Emissions
Emissions = D x E x F x G

	D	E	F	G									
		Trips/	Miles/	Emission Factors in Pounds per Mile[2]					Emissions in Pounds per Day				
Vehicle Type	Quantity	Vehicle	Trip	CO	VOC	NOx	SOx	PM_{10}	CO	VOC	NOx	SOx	PM_{10}
Haul Trucks	20	2	50	0.025508	0.003362	0.031208	0.000241	0.001003	51.0	6.7	62.4	0.5	2.0
Construction Employees	30	3.7	10.6	0.01815	0.001935	0.002014	0.00001	0.000112	2.0	0.2	0.2	0.0	0.0
Subtotal									53.0	6.9	62.6	0.5	2.0

[2] Emission factors from EMFAC 2002 (Year 2003).

Site Grading
PM_{10} Emissions = (10.0 lbs per day x H) - I[3]

	H	I		PM_{10}
	Acres/	Rule 403 Reduction		Emissions
Emissions Source	Day	%	lbs	(lbs/day)
Site Grading	15	68%	102.0	48.0

[3] Emission Factors from URBEMIS 2001.

Total Site Excavation and Grading Phase Emissions

	Emissions in Pounds per Day				
Emissions Source	CO	VOC	NOx	SOx	PM_{10}
Construction Equipment	86.9	19.1	254.6	33.2	25.7
On-Road Vehicles	53.0	6.9	62.6	0.5	2.0
Site Grading	-	-	-	-	48.0
Total	140.0	26.1	317.2	33.7	75.7
SCAQMD Threshold	550.0	75.0	100.0	150.0	150.0
Exceeds Threshold?	No	No	Yes	No	No

CONSTRUCTION EMISSIONS ESTIMATES
DEMOLITION PHASE

Project Number: 10261-00
Project Name: Pacific City

Construction Equipment Emissions
Emissions = A x B x C

	A	B	C									
		Hours/	Emission Factors in Pounds per Hour[1]					Emissions in Pounds per Day				
Equipment Type	Quantity	Day	CO	VOC	NOx	SOx	PM_{10}	CO	VOC	NOx	SOx	PM_{10}
Generator Sets	0	2	1.479	0.054	0.002	0.0006	0.00025	-	-	-	-	-
Fork Lift - 50 Hp	0	8	0.18	0.053	0.441	0	0.031	-	-	-	-	-
Fork Lift - 175 Hp	0	5	0.52	0.17	1.54	0	0.93	-	-	-	-	-
Water Truck	0	2	1.8	0.19	4.17	0.45	0.26	-	-	-	-	-
Tracked Loader	0	6	0.201	0.095	0.83	0.076	0.059	-	-	-	-	-
Tracked Tractor	0	6	0.35	0.12	1.26	0.14	0.112	-	-	-	-	-
Scraper	0	7	1.25	0.27	3.84	0.46	0.41	-	-	-	-	-
Wheeled Dozer	0	5	0.572	0.12	0.713	0.35	0.165	-	-	-	-	-
Wheeled Loader	0	5	0.572	0.23	1.9	0.182	0.17	-	-	-	-	-
Wheeled Tractor	0	6	3.58	0.18	1.27	0.09	0.14	-	-	-	-	-
Roller	0	6	0.3	0.065	0.87	0.067	0.05	-	-	-	-	-
Motor Grader	0	6	0.151	0.039	0.713	0.086	0.061	-	-	-	-	-
Miscellaneous	0	6	0.675	0.15	1.7	0.143	0.14	-	-	-	-	-
Crane	0	4	0.75078	0.25026	1.91866	0.16684	0.12513	-	-	-	-	-
Backhoe	0	3.5	0.572	0.23	1.9	0.17	0.182	-	-	-	-	-
Crushing Equipment	0	4	1.9812	0.29718	2.37744	0.19812	0.14859	-	-	-	-	-
Subtotal								0.0	0.0	0.0	0.0	0.0

[1] Emission Factors from SCAQMD CEQA Air Quality Handbook (1993), Tables A9-8-A, A9-8-B, A9-8-C, and A9-8-D.

On-Road Vehicle Source Emissions
Emissions = D x E x F x G

	D	E	F	G									
		Trips/	Miles/	Emission Factors in Pounds per Mile[2]					Emissions in Pounds per Day				
Vehicle Type	Quantity	Vehicle	Trip	CO	VOC	NOx	SOx	PM_{10}	CO	VOC	NOx	SOx	PM_{10}
Haul Trucks	0	0	0	0.025508	0.003362	0.031208	0.000241	0.001003	-	-	-	-	-
Construction Employees	0	3.7	-	0.01815	0.001935	0.002014	0.00001	0.000112	-	-	-	-	-
Subtotal									0.0	0.0	0.0	0.0	0.0

[2] Emission factors from EMFAC 2002 (Year 2003).

Structure Demolition
PM_{10} Emissions = 0.00042 lbs per cubic foot x H / I[3]

	H	I	PM_{10}
	Cubic Feet	Days of	Emissions
Emissions Source	of Bldg.	Demolition	(lbs/day)
Structure Demolition	0	1	0.0

[3] Emission Factors from SCAQMD CEQA Air Quality Handbook (1993), Table A9-9-H.

Total Demolition Phase Emissions

	Emissions in Pounds per Day				
Emissions Source	CO	VOC	NOx	SOx	PM_{10}
Construction Equipment	0.0	0.0	0.0	0.0	0.0
On-Road Vehicles	0.0	0.0	0.0	0.0	0.0
Structure Demolition	-	-	-	-	0.0
Total	0.0	0.0	0.0	0.0	0.0
SCAQMD Threshold	550.0	75.0	100.0	150.0	150.0
Exceeds Threshold?	No	No	No	No	No

CONSTRUCTION EMISSIONS ESTIMATES
CONSTRUCTION PHASE

Project Number: 10261-00
Project Name: Pacific City

Construction Equipment Emissions
Emissions = A x B x C

	A	B	C									
		Hours/	Emission Factors in Pounds per Hour[1]					Emissions in Pounds per Day				
Equipment Type	Quantity	Day	CO	VOC	NOx	SOx	PM_{10}	CO	VOC	NOx	SOx	PM_{10}
Generator Sets	8	2	1.479	0.054	0.002	0.0008	0.00025	23.7	0.9	0.0	0.0	0.0
Fork Lift - 50 Hp	7	5	0.18	0.053	0.441	0	0.031	6.3	1.9	15.4	0.0	1.1
Fork Lift - 175 Hp	7	5	0.52	0.17	1.54	0	0.93	18.2	6.0	53.9	0.0	32.6
Water Truck	2	2	1.8	0.19	4.17	0.45	0.26	7.2	0.8	16.7	1.8	1.0
Tracked Loader	0	6	0.201	0.095	0.83	0.076	0.059	-	-	-	-	-
Tracked Tractor	0	6	0.35	0.12	1.26	0.14	0.112	-	-	-	-	-
Scraper	0	7	1.25	0.27	3.84	0.46	0.41	-	-	-	-	-
Wheeled Dozer	0	5	0.572	0.12	0.713	0.35	0.165	-	-	-	-	-
Wheeled Loader	0	5	0.572	0.23	1.9	0.182	0.17	-	-	-	-	-
Wheeled Tractor	0	6	3.58	0.18	1.27	0.09	0.14	-	-	-	-	-
Roller	2	6	0.3	0.065	0.87	0.067	0.05	3.6	0.8	10.4	0.8	0.6
Motor Grader	0	6	0.151	0.039	0.713	0.086	0.061	-	-	-	-	-
Miscellaneous	0	6	0.675	0.15	1.7	0.143	0.14	-	-	-	-	-
Crane	2	4	0.75078	0.25026	1.91866	0.16684	0.12513	6.0	2.0	15.3	1.3	1.0
Backhoe	6	3.5	0.572	0.23	1.9	0.17	0.182	12.0	4.8	39.9	3.6	3.8
Paving Equipment	1	6	0.675	0.15	1.7	0.143	0.14	4.1	0.9	10.2	0.9	0.8
Subtotal								81.0	17.9	161.9	8.4	40.9

[1] Emission Factors from SCAQMD CEQA Air Quality Handbook (1993), Tables A9-8-A, A9-8-B, A9-8-C, and A9-8-D.

On-Road Vehicle Source Emissions
Emissions = D x E x F x G

	D	E	F	G									
		Trips/	Miles/	Emission Factors in Pounds per Mile[2]					Emissions in Pounds per Day				
Vehicle Type	Quantity	Vehicle	Trip	CO	VOC	NOx	SOx	PM_{10}	CO	VOC	NOx	SOx	PM_{10}
Haul Trucks	12	0	50	0.025508	0.003362	0.031208	0.000241	0.001003	0.0	0.0	0.0	0.0	0.0
Construction Employees	80	3.7	10.6	0.01815	0.001935	0.002014	0.00001	0.000112	5.4	0.6	0.6	0.0	0.0
Subtotal									5.4	0.6	0.6	0.0	0.0

[2] Emission factors from EMFAC 2002 (Year 2003).

Stationary Source Emissions
Emissions = H x I

	H	I					
	Units or	Factors in Pounds per Day[3]			Emissions in Pounds per Day		
Emissions Source	1,000 sf	VOC	NOx	PM_{10}	VOC	NOx	PM_{10}
Stationary Sources	4	0.168	0.137	0.008	0.7	0.5	0.0

[3] Emission Factors from URBEMIS7G (2000).

Asphalt Paving
ROC Emissions = 2.62 lbs per acre x J / K[4]

	A	B	ROC
	Acres of	Days of	Emissions
Emissions Source	Paving	Paving	(lbs/day)
Asphalt Paving	0.5	1	1.3

[4] Emission Factors from URBEMIS7G (2000).

Architectural Coatings
VOC Emissions = 0.0185 lbs per square foot x L[5]

	L	
	Surface Area/	VOC Emissions
Emissions Source	Day	(lbs/day)
Architectural Coatings	5000	92.5

[5] Emission Factors from URBEMIS7G (2000).

Total Construction Phase Emissions

	Emissions in Pounds per Day				
Emissions Source	CO	VOC	NOx	SOx	PM_{10}
Construction Equipment	81.0	17.9	161.9	8.4	40.9
On-Road Vehicles	5.4	0.6	0.6	0.0	0.0
Stationary Equipment	-	0.7	0.5	-	0.0
Asphalt Paving	-	1.3	-	-	-
Architectural Coatings	-	92.5	-	-	-
Total	86.4	113.0	163.1	8.4	41.0
SCAQMD Threshold	550.0	75.0	100.0	150.0	150.0
Exceeds Threshold?	No	Yes	Yes	No	No

CONSTRUCTION EMISSIONS ESTIMATES
LANDSCAPING PHASE

Project Number: 10261-00
Project Name: Pacific City

Construction Equipment Emissions
Emissions = A x B x C

	A	B	C									
		Hours/	Emission Factors in Pounds per Hour[1]					Emissions in Pounds per Day				
Equipment Type	Quantity	Day	CO	VOC	NOx	SOx	PM_{10}	CO	VOC	NOx	SOx	PM_{10}
Fork Lift - 50 Hp	0	5	0.18	0.053	0.441	0	0.031	-	-	-	-	-
Fork Lift - 175 Hp	0	5	0.52	0.17	1.54	0	0.93	-	-	-	-	-
Wheeled Dozer	0	5	0.572	0.12	0.713	0.35	0.165	-	-	-	-	-
Wheeled Loader	0	5	0.572	0.23	1.9	0.182	0.17	-	-	-	-	-
Wheeled Tractor	0	6	3.58	0.18	1.27	0.09	0.14	-	-	-	-	-
Miscellaneous	0	6	0.675	0.15	1.7	0.143	0.14	-	-	-	-	-
Subtotal								0.0	0.0	0.0	0.0	0.0

[1] Emission Factors from SCAQMD CEQA Air Quality Handbook (1993), Tables A9-8-A, A9-8-B, A9-8-C, and A9-8-D.

On-Road Vehicle Source Emissions
Emissions = D x E x F x G

	D	E	F	G									
		Trips/	Miles/	Emission Factors in Pounds per Mile[2]					Emissions in Pounds per Day				
Vehicle Type	Quantity	Vehicle	Trip	CO	VOC	NOx	SOx	PM_{10}	CO	VOC	NOx	SOx	PM_{10}
Haul Trucks	0	0	0	0.025508	0.003362	0.031208	0.000241	0.001003	-	-	-	-	-
Construction Employees	0	3.7	-	0.01815	0.001935	0.002014	0.00001	0.000112	-	-	-	-	-
Subtotal									0.0	0.0	0.0	0.0	0.0

[2] Emission factors from EMFAC 2002 (Year 2003).

Soil Disturbance
PM_{10} Emissions = (10.0 lbs per day x H) - I[3]

	H	I		PM_{10}
	Acres/	Rule 403 Reduction		Emissions
Emissions Source	Day	%	lbs	(lbs/day)
Soil Disturbance	0	0%	0.0	0.0

[3] Emission Factors from URBEMIS7G (2000).

Total Site Landscaping Phase Emissions

	Emissions in Pounds per Day				
Emissions Source	CO	VOC	NOx	SOx	PM_{10}
Construction Equipment	0.0	0.0	0.0	0.0	0.0
On-Road Vehicles	0.0	0.0	0.0	0.0	0.0
Soil Disturbance	-	-	-	-	0.0
Total	0.0	0.0	0.0	0.0	0.0
SCAQMD Threshold	550.0	75.0	100.0	150.0	150.0
Exceeds Threshold?	No	No	No	No	No

EXPLANATION OF CHANGES MADE TO DEFAULT SETTINGS IN URBEMIS 2002

Project Number: 10261-00
Project Name: Pacific City
Analysis Scenario: Proposed Project

The following pages include the printed results of the air pollutant emissions modeling for one of the land use components of the proposed project. The air emissions modeling was conducted using the URBEMIS 2002 for Windows computer program developed for the Yolo-Solano Air Quality Management District in May 2003. URBEMIS 2002 is programmed with EMFAC 2002 emission factors developed by the California Air Resources Board.

As part of this analysis, changes have been made to several of the default values programmed into URBEMIS 2002. These changes were made to more accurately reflect the nature of the proposed land use. Each of these changes are discussed below.

Vehicle Trip Rates

The default vehicle trip rate values were changed to be consistent with the traffic impact analysis prepared for the project.

Vehicle Fleet Mix

URBEMIS 2001 is programmed with the following state-wide average vehicle fleet mix:

State-Wide Vehicle Type	Total	
Automobiles	54.7%	
Light-Duty Trucks <3,750 pounds	15.2%	
Light-Duty Trucks 3,751-5,750 pounds	16.2%	
Medium-Duty Trucks 5,751-8,500 pounds	7.3%	
Light-Heavy-Duty Trucks 8,501-10,000 pounds	1.1%	
Light-Heavy-Duty Trucks 10,001-14,000 pounds	0.3%	10.60% Total Trucks
Medium-Heavy-Duty Trucks 14,001-33,000 pounds	1.0%	
Heavy-Heavy-Duty Trucks 33,001-60,000 pounds	0.9%	
Line-Haul Vehicles	0.0%	
Urban Buses	0.2%	
Motorcycles	1.6%	
School Buses	0.1%	
Motor Homes	1.4%	

However, this state-wide average fleet mix is not appropriate for the majority of land use analyses. The project land use assessed in this analysis is identified below along with the total percentage of trucks (medium and heavy) that are expected for this land use. The following vehicle mix was calculated based on the percentage of trucks associated with this land use. The percentage of trucks for each land use were determined from the 3rd, 4th, 5th, and 6th Editions of the ITE Trip Generation manual.

ITE Code	Project Land Use:	Truck %	ADT	Truck #
310	Hotel	1.84%	2,249	41
710	General Office	1.84%	672	12
820	Shopping Center	2.10%	7,033	148
MU	Museum	0.44%	0	0
230	Residential Condo	0.88%	2,048	18
0			0	0
0			0	0
0			0	0
0			0	0
0			0	0
0			0	0
0			0	0
		Project Totals:	12,002	219
		Project Truck %:	1.83%	

Vehicle Type	Total	
Automobiles	60.07%	
Light-Duty Trucks <3,750 pounds	16.69%	
Light-Duty Trucks 3,751-5,750 pounds	17.79%	
Medium-Duty Trucks 5,751-8,500 pounds	1.26%	
Light-Heavy-Duty Trucks 8,501-10,000 pounds	0.19%	
Light-Heavy-Duty Trucks 10,001-14,000 pounds	0.05%	1.83% Total Trucks
Medium-Heavy-Duty Trucks 14,001-33,000 pounds	0.17%	
Heavy-Heavy-Duty Trucks 33,001-60,000 pounds	0.16%	
Line-Haul Vehicles	0.00%	
Urban Buses	0.22%	
Motorcycles	1.76%	
School Buses	0.11%	
Motor Homes	1.54%	

URBEMIS 2002 For Windows 7.4.2

File Name: C:\Program Files\URBEMIS 2002 For Windows\Projects2k2\Pacific City - Project.urb
Project Name: 10261-00 Pacific City - Proposed Project
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	25.96	7.94	4.37	0.00	0.02
TOTALS (lbs/day, mitigated)	25.96	7.94	4.37	0.00	0.02

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	52.90	60.62	572.79	0.40	75.32
TOTALS (lbs/day, mitigated)	44.98	51.05	482.76	0.34	63.53

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	78.86	68.56	577.16	0.40	75.34
TOTALS (lbs/day, mitigated)	70.94	58.99	487.13	0.34	63.55

URBEMIS 2002 For Windows 7.4.2

File Name: C:\Program Files\URBEMIS 2002 For Windows\Projects2k2\Pacific City - Project.urb
Project Name: 10261-00 Pacific City - Proposed Project
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.59	7.92	3.27	-	0.01
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.13	0.02	1.10	0.00	0.00
Consumer Prdcts	25.24	-	-	-	-
TOTALS(lbs/day,unmitigated)	25.96	7.94	4.37	0.00	0.02

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Condo/townhouse general	12.20	13.74	133.54	0.10	18.12
Hotel	9.97	10.89	101.86	0.07	13.41
Regnl shop. center	27.17	31.54	295.10	0.20	37.96
General office building	3.56	4.44	42.29	0.03	5.83
TOTAL EMISSIONS (lbs/day)	52.90	60.62	572.79	0.40	75.32

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 70 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Condo/townhouse general	3.97 trips / dwelling units	516.00	2,048.52
Hotel	5.62 trips / rooms	400.00	2,248.00
Regnl shop. center	40.19 trips / 1000 sq. ft.	175.00	7,033.25
General office building	11.20 trips / 1000 sq. ft.	60.00	672.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	60.07	1.10	98.70	0.20
Light Truck < 3,750 lbs	16.69	2.00	96.00	2.00
Light Truck 3,751- 5,750	17.79	1.20	98.10	0.70
Med Truck 5,751- 8,500	1.26	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	0.19	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.05	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.17	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.16	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.22	0.00	50.00	50.00
Motorcycle	1.76	68.80	31.20	0.00
School Bus	0.11	0.00	0.00	100.00
Motor Home	1.53	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Regnl shop. center				2.0	1.0	97.0
General office building				35.0	17.5	47.5

MITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Condo/townhouse general	11.10	12.34	119.88	0.09	16.26
Hotel	8.41	8.99	84.12	0.06	11.07
Regnl shop. center	22.40	25.92	242.49	0.17	31.20
General office building	3.07	3.81	36.27	0.03	5.00
TOTAL EMISSIONS (lbs/day)	44.98	51.05	482.76	0.34	63.53

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 70 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Condo/townhouse general	3.97 trips / dwelling units	516.00	2,048.52
Hotel	5.62 trips / rooms	400.00	2,248.00
Regnl shop. center	40.19 trips / 1000 sq. ft.	175.00	7,033.25
General office building	11.20 trips / 1000 sq. ft.	60.00	672.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	60.07	1.10	98.70	0.20
Light Truck < 3,750 lbs	16.69	2.00	96.00	2.00
Light Truck 3,751- 5,750	17.79	1.20	98.10	0.70
Med Truck 5,751- 8,500	1.26	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	0.19	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.05	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.17	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.16	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.22	0.00	50.00	50.00
Motorcycle	1.76	68.80	31.20	0.00
School Bus	0.11	0.00	0.00	100.00
Motor Home	1.53	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Regnl shop. center				2.0	1.0	97.0
General office building				35.0	17.5	47.5

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

3.0	Side Walks/Paths: Complete Coverage
1.0	Street Trees Provide Shade: Moderate Coverage
3.0	Pedestrian Circulation Access: Most Destinations
5.0	Visually Interesting Uses: Large Number and Variety
1.0	Street System Enhances Safety: Some Streets
1.0	Pedestrian Safety from Crime: Moderate Degree of Safety
2.0	Visually Interesting Walking Routes: High Level

16.0 <- Pedestrian Environmental Credit
16.0 /19 = 0.8 <- Pedestrian Effectiveness Factor

Transit Service

12.0	Transit Service: 31-60 Minute Bus within 1/4 Mile

12.0 <- Transit Effectiveness Credit
16.0 <- Pedestrian Factor
28.0 <-Total
28.0 /110 = 0.3 <-Transit Effectiveness Factor

Bicycle Environment

3.0	Interconnected Bikeways: Moderate Coverage
2.0	Bike Routes Provide Paved Shoulders: Some Routes
1.0	Safe Vehicle Speed Limits: Some Destinations
2.0	Safe School Routes: Primary and Secondary Schools
3.0	Uses w/in Cycling Distance: Large Number and Variety
1.0	Bike Parking Ordinance: Requires Unprotected Bike Racks

12.0 <- Bike Environmental Credit
12.0 /20 = 0.6 <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if
the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

% Trips Reduced	Measure
15.0	Credit for Existing or Planned Community Transit Service
6.0	Project Density Meets Transit Level of Service Requirements
2.0	Provide Transit Shelters Benches
0.5	Provide Street Lighting
0.5	Provide Route Signs and Displays
1.0	Provide Bus Turnouts
25.0 <- Totals	

Pedestrian Enhancing Infrastructure Measures (Residential)

% Trips Reduced	Measure
2.0	Credit for Surrounding Pedestrian Environment
1.0	Provide Sidewalks and/or Pedestrian Paths
1.0	Provide Direct Pedestrian Connections
0.5	Provide Pedestrian Safety
0.5	Provide Street Furniture
0.5	Provide Street Lighting
0.5	Provide Pedestrian Signalization and Signage
6.0 <- Totals	

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
2.0	Credit for Surrounding Pedestrian Environment
1.0	Mixed Use Project (Commercial Oriented)
1.0	Floor Area Ratio 0.75 or Greater
1.0	Provide Wide Sidewalks and Onsite Pedestrian Facilities
1.0	Project Uses Parking Structures/Small Dispersed Lots
0.5	Provide Street Lighting
0.5	Project Provides Shade Trees to Shade Sidewalks
0.5	Project Provides Street Art and/or Street Furniture
0.5	Provide Pedestrian Safety Designs/Infrastructure at Crossings
0.3	Articulated Storefront(s) Display Windows with Visual Interest
8.3 <- Totals	

Bicycle Enhancing Infratructure Measures (Residential)

% Trips Reduced	Measure
7.0	Credit for Surrounding Bicycle Environment
2.0	Provide Bike Lanes/Paths Connecting to Bikeway System
9.0 <- Totals	

Bike Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
5.0	Credit for Surrounding Area Bike Environment
2.0	Provide Bike Lanes/Paths Connecting to Bikeway System
1.0	Provide Securre Bicycle Parking
8.0 <- Totals	

Operational Measures (Applying to Commute Trips)

% Trips Reduced	Measure
0.0 <- Totals	

Operational Measures (Applying to Employee Non-Commute Trips)

% Trips Reduced	Measure
5.0	Many Frequently Needed Services Provided
5.0 <- Totals	

Operational Measures (Applying to Customer Trips)

% Trips Reduced	Measure
0.0 <- Totals	

Measures Reducing VMT (Non-Residential)

VMT Reduced	Measure
0.0 <- Totals	

Measures Reducing VMT (Residential)

URBEMIS 2002 For Windows 7.4.2

File Name: C:\Program Files\URBEMIS 2002 For Windows\Projects2k2\Pacific City - No Reduction.urb
Project Name: 10261-00 Pacific City - Proposed Project with No Mixed-Use Trip Reduction
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	25.96	7.94	4.37	0.00	0.02

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	71.33	82.92	783.03	0.55	102.89

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	97.29	90.85	787.40	0.55	102.91

URBEMIS 2002 For Windows 7.4.2

File Name: C:\Program Files\URBEMIS 2002 For Windows\Projects2k2\Pacific City - No Reduction.urb
Project Name: 10261-00 Pacific City - Proposed Project with No Mixed-Use Trip Reduction
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.59	7.92	3.27	-	0.01
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.13	0.02	1.10	0.00	0.00
Consumer Prdcts	25.24	-	-	-	-
TOTALS(lbs/day,unmitigated)	25.96	7.94	4.37	0.00	0.02

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
:ondo/townhouse general	15.27	17.62	171.21	0.12	23.23
'otel	13.80	15.57	145.54	0.10	19.16
:egnl shop. center	37.56	43.81	409.86	0.28	52.73
:eneral office building	4.70	5.92	56.41	0.04	7.78
:OTAL EMISSIONS (lbs/day)	71.33	82.92	783.03	0.55	102.89

:ncludes correction for passby trips.
)oes not include double counting adjustment for internal trips.

)PERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 70 Season: Summer

:MFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Condo/townhouse general	5.09 trips / dwelling units	516.00	2,626.44
Hotel	8.03 trips / rooms	400.00	3,212.00
Regnl shop. center	55.82 trips / 1000 sq. ft.	175.00	9,768.50
General office building	14.94 trips / 1000 sq. ft.	60.00	896.40

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	60.07	1.10	98.70	0.20
Light Truck < 3,750 lbs	16.69	2.00	96.00	2.00
Light Truck 3,751- 5,750	17.79	1.20	98.10	0.70
Med Truck 5,751- 8,500	1.26	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	0.19	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.05	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.17	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.16	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.22	0.00	50.00	50.00
Motorcycle	1.76	68.80	31.20	0.00
School Bus	0.11	0.00	0.00	100.00
Motor Home	1.53	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Regnl shop. center				2.0	1.0	97.0
General office building				35.0	17.5	47.5

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The landscape year changed from 2004 to 2010.
New mitigation measure :Rsdntl Space Heat.
has been added.
New mitigation measure :Cmrcl Space Heat.
has been added.

Changes made to the default values for Operations

The pass by trips option switch changed from off to on.
The light auto percentage changed from 54.7 to 60.07.
The light truck < 3750 lbs percentage changed from 15.2 to 16.69.
The light truck 3751-5750 percentage changed from 16.2 to 17.79.
The med truck 5751-8500 percentage changed from 7.3 to 1.26.
The lite-heavy truck 8501-10000 percentage changed from 1.1 to 0.19.
The lite-heavy truck 10001-14000 percentage changed from 0.3 to 0.05.
The med-heavy truck 14001-33000 percentage changed from 1.0 to 0.17.
The heavy-heavy truck 33001-60000 percentage changed from 0.9 to 0.16.
The urban bus percentage changed from 0.2 to 0.22.
The motorcycle percentage changed from 1.6 to 1.76.
The school bus percentage changed from 0.1 to 0.11.
The motorhome percentage changed from 1.4 to 1.53.
The operational emission year changed from 2004 to 2010.
The operational winter selection item changed from 3 to 2.
The operational summer temperature changed from 90 to 70.
The operational summer selection item changed from 8 to 4.
The double counting internal work trip limit changed from to 525.288.
The double counting shopping trip limit changed from to 334.855.
The double counting other trip limit changed from to 1129.3692.
The travel mode environment settings changed from both to: both
The default/nodefault travel setting changed from nodefault to: nodefault
Side Walks/Paths: No Sidewalks
changed to: Side Walks/Paths: Complete Coverage
Street Trees Provide Shade: No Coverage
changed to:Street Trees Provide Shade: Moderate Coverage
Pedestrian Circulation Access: No Destinations
changed to:Pedestrian Circulation Access: Most Destinations
Visually Interesting Uses: No Uses Within Walking Distance
changed to:Visually Interesting Uses: Large Number and Variety
Street System Enhances Safety: No Streets
changed to: Street System Enhances Safety: Some Streets
Pedestrian Safety from Crime: No Degree of Safety
changed to:Pedestrian Safety from Crime: Moderate Degree of Safety
Visually Interesting Walking Routes: No Visual Interest
changed to:Visually Interesting Walking Routes: High Level
Transit Service: Dial-A-Ride or No Transit Service
changed to: Transit Service: 31-60 Minute Bus within 1/4 Mile
Interconnected Bikeways: No Bikeway Coverage
changed to: Interconnected Bikeways: Moderate Coverage
Bike Routes Provide Paved Shoulders: No Routes
changed to:Bike Routes Provide Paved Shoulders: Some Routes
Safe Vehicle Speed Limits: No Routes Provided
changed to:Safe Vehicle Speed Limits: Some Destinations
Safe School Routes: No Schools
changed to: Safe School Routes: Primary and Secondary Schools
Uses w/in Cycling Distance: No Uses w/in Cycling Distance
changed to:Uses w/in Cycling Distance: Large Number and Variety
Bike Parking Ordinance: No Ordinance or Unenforceable
changed to:Bike Parking Ordinance: Requires Unprotected Bike Racks
Mitigation measure Project Density Meets Transit Level of Service Requirements:6
has been changed from off to on.
Mitigation measure Provide Transit Shelters Benches:2
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Route Signs and Displays:0.5
has been changed from off to on.
Mitigation measure Provide Bus Turnouts:1
has been changed from off to on.
Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1
has been changed from off to on.
Mitigation measure Provide Direct Pedestrian Connections:1
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety:0.5

has been changed from off to on.
Mitigation measure Provide Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Signalization and Signage:0.5
has been changed from off to on.
Mitigation measure Mixed Use Project (Commercial Oriented):1
has been changed from off to on.
Mitigation measure Floor Area Ratio 0.75 or Greater:1
has been changed from off to on.
Mitigation measure Provide Wide Sidewalks and Onsite Pedestrian Facilities:1
has been changed from off to on.
Mitigation measure Project Uses Parking Structures/Small Dispersed Lots:1
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Project Provides Shade Trees to Shade Sidewalks:0.5
has been changed from off to on.
Mitigation measure Project Provides Street Art and/or Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety Designs/Infrastructure at Crossings:0.5
has been changed from off to on.
Mitigation measure Articulated Storefront(s) Display Windows with Visual Interest:0.25
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Securre Bicycle Parking:1
has been changed from off to on.
Mitigation measure Many Frequently Needed Services Provided:5
has been changed from off to on.
Mitigation measuremitop5: Park and Ride Lots
has been changed from on to off.

URBEMIS 2002 For Windows 7.4.2

File Name: C:\Program Files\URBEMIS 2002 For Windows\Projects2k2\Pacific City - Project Mitigated.u
Project Name: 10261-00 Pacific City - Proposed Project Mitigated
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	25.96	7.94	4.37	0.00	0.02
TOTALS (lbs/day, mitigated)	25.95	7.77	4.29	0.00	0.02

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	52.90	60.62	572.79	0.40	75.32
TOTALS (lbs/day, mitigated)	44.98	51.05	482.70	0.34	63.52

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	78.86	68.56	577.16	0.40	75.34
TOTALS (lbs/day, mitigated)	70.93	58.82	486.99	0.34	63.54

URBEMIS 2002 For Windows 7.4.2

File Name: C:\Program Files\URBEMIS 2002 For Windows\Projects2k2\Pacific City - Project Mitigated.u
Project Name: 10261-00 Pacific City - Proposed Project Mitigated
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.59	7.92	3.27	-	0.01
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.13	0.02	1.10	0.00	0.00
Consumer Prdcts	25.24	-	-	-	-
TOTALS(lbs/day,unmitigated)	25.96	7.94	4.37	0.00	0.02

AREA SOURCE EMISSION ESTIMATES

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.58	7.75	3.19	-	0.01
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.13	0.02	1.10	0.00	0.00
Consumer Prdcts	25.24	-	-	-	-
TOTALS (lbs/day, mitigated)	25.95	7.77	4.29	0.00	0.02

Area Source Mitigation Measures

Solar Water Heaters: Rsdntl Water Heat.
Percent Reduction(ROG 11% NOx 9.5% CO 4.5% SO2 0% PM10 10%)
Solar Water Heaters: Cmrcl Water Heat.
Percent Reduction(ROG 0.5% NOx 0.5% CO 0.5% SO2 0.5% PM10 0.5%)

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Condo/townhouse general	12.20	13.74	133.54	0.10	18.12
Hotel	9.97	10.89	101.86	0.07	13.41
Regnl shop. center	27.17	31.54	295.10	0.20	37.96
General office building	3.56	4.44	42.29	0.03	5.83
TOTAL EMISSIONS (lbs/day)	52.90	60.62	572.79	0.40	75.32

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 70 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Condo/townhouse general	3.97 trips / dwelling units	516.00	2,048.52
Hotel	5.62 trips / rooms	400.00	2,248.00
Regnl shop. center	40.19 trips / 1000 sq. ft.	175.00	7,033.25
General office building	11.20 trips / 1000 sq. ft.	60.00	672.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	60.07	1.10	98.70	0.20
Light Truck < 3,750 lbs	16.69	2.00	96.00	2.00
Light Truck 3,751- 5,750	17.79	1.20	98.10	0.70
Med Truck 5,751- 8,500	1.26	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	0.19	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.05	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.17	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.16	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.22	0.00	50.00	50.00
Motorcycle	1.76	68.80	31.20	0.00
School Bus	0.11	0.00	0.00	100.00
Motor Home	1.53	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Regnl shop. center				2.0	1.0	97.0
General office building				35.0	17.5	47.5

MITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Condo/townhouse general	11.10	12.34	119.88	0.09	16.26
Hotel	8.41	8.99	84.10	0.06	11.07
Regnl shop. center	22.40	25.91	242.47	0.17	31.19
General office building	3.07	3.80	36.24	0.03	5.00
TOTAL EMISSIONS (lbs/day)	44.98	51.05	482.70	0.34	63.52

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 70 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Condo/townhouse general	3.97 trips / dwelling units	516.00	2,048.52
Hotel	5.62 trips / rooms	400.00	2,248.00
Regnl shop. center	40.19 trips / 1000 sq. ft.	175.00	7,033.25
General office building	11.20 trips / 1000 sq. ft.	60.00	672.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	60.07	1.10	98.70	0.20
Light Truck < 3,750 lbs	16.69	2.00	96.00	2.00
Light Truck 3,751- 5,750	17.79	1.20	98.10	0.70
Med Truck 5,751- 8,500	1.26	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	0.19	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.05	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.17	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.16	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.22	0.00	50.00	50.00
Motorcycle	1.76	68.80	31.20	0.00
School Bus	0.11	0.00	0.00	100.00
Motor Home	1.53	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Regnl shop. center				2.0	1.0	97.0
General office building				35.0	17.5	47.5

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

3.0	Side Walks/Paths: Complete Coverage
1.0	Street Trees Provide Shade: Moderate Coverage
3.0	Pedestrian Circulation Access: Most Destinations
5.0	Visually Interesting Uses: Large Number and Variety
1.0	Street System Enhances Safety: Some Streets
1.0	Pedestrian Safety from Crime: Moderate Degree of Safety
2.0	Visually Interesting Walking Routes: High Level

16.0 <- Pedestrian Environmental Credit
16.0 /19 = 0.8 <- Pedestrian Effectiveness Factor

Transit Service

12.0	Transit Service: 31-60 Minute Bus within 1/4 Mile

12.0 <- Transit Effectiveness Credit
16.0 <- Pedestrian Factor
28.0 <-Total
28.0 /110 = 0.3 <-Transit Effectiveness Factor

Bicycle Environment

3.0	Interconnected Bikeways: Moderate Coverage
2.0	Bike Routes Provide Paved Shoulders: Some Routes
1.0	Safe Vehicle Speed Limits: Some Destinations
2.0	Safe School Routes: Primary and Secondary Schools
3.0	Uses w/in Cycling Distance: Large Number and Variety
1.0	Bike Parking Ordinance: Requires Unprotected Bike Racks

12.0 <- Bike Environmental Credit
12.0 /20 = 0.6 <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if
the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

% Trips Reduced	Measure
15.0	Credit for Existing or Planned Community Transit Service
6.0	Project Density Meets Transit Level of Service Requirements
2.0	Provide Transit Shelters Benches
0.5	Provide Street Lighting
0.5	Provide Route Signs and Displays
1.0	Provide Bus Turnouts
25.0	<- Totals

Pedestrian Enhancing Infrastructure Measures (Residential)

% Trips Reduced	Measure
2.0	Credit for Surrounding Pedestrian Environment
1.0	Provide Sidewalks and/or Pedestrian Paths
1.0	Provide Direct Pedestrian Connections
0.5	Provide Pedestrian Safety
0.5	Provide Street Furniture
0.5	Provide Street Lighting
0.5	Provide Pedestrian Signalization and Signage
6.0	<- Totals

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
2.0	Credit for Surrounding Pedestrian Environment
1.0	Mixed Use Project (Commercial Oriented)
1.0	Floor Area Ratio 0.75 or Greater
1.0	Provide Wide Sidewalks and Onsite Pedestrian Facilities
1.0	Project Uses Parking Structures/Small Dispersed Lots
0.5	Provide Street Lighting
0.5	Project Provides Shade Trees to Shade Sidewalks
0.5	Project Provides Street Art and/or Street Furniture
0.5	Provide Pedestrian Safety Designs/Infrastructure at Crossings
0.3	Articulated Storefront(s) Display Windows with Visual Interest
8.3	<- Totals

Bicycle Enhancing Infratructure Measures (Residential)

% Trips Reduced	Measure
7.0	Credit for Surrounding Bicycle Environment
2.0	Provide Bike Lanes/Paths Connecting to Bikeway System
9.0	<- Totals

Bike Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
5.0	Credit for Surrounding Area Bike Environment
2.0	Provide Bike Lanes/Paths Connecting to Bikeway System
1.0	Provide Securre Bicycle Parking
8.0	<- Totals

Operational Measures (Applying to Commute Trips)

% Trips Reduced	Measure
1.5	Preferential Carpool/Vanpool Parking
1.5	<- Totals

Operational Measures (Applying to Employee Non-Commute Trips)

% Trips Reduced	Measure
5.0	Many Frequently Needed Services Provided
5.0	<- Totals

Operational Measures (Applying to Customer Trips)

% Trips Reduced	Measure
0.0	<- Totals

Measures Reducing VMT (Non-Residential)

VMT Reduced	Measure
0.0	<- Totals

Measures Reducing VMT (Residential)

VMT Reduced		Measure
0.0	<- Totals	

Total Percentage Trip Reduction
with Environmental Factors and Mitigation Measures

Travel Mode	Home-Work Trips	Home-Shop Trips	Home-Other Trips
Pedestrian	0.56	2.22	2.22
Transit	6.36	1.40	1.72
Bicycle	5.40	5.40	5.40
Totals	0.00	0.00	0.00

Travel Mode	Work Trips	Employee Trips	Customer Trips
Pedestrian	0.76	6.95	6.95
Transit	6.36	0.13	6.36
Bicycle	4.80	4.80	4.80
Other	0.00	0.26	0.00
Totals	0.00	0.00	0.00

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The area souce mitigation measure option switch changed from off to on.
The landscape year changed from 2004 to 2010.
New mitigation measure :Rsdntl Space Heat.
has been added.
New mitigation measure :Cmrcl Space Heat.
has been added.

Changes made to the default values for Operations

The pass by trips option switch changed from off to on.
The light auto percentage changed from 54.7 to 60.07.
The light truck < 3750 lbs percentage changed from 15.2 to 16.69.
The light truck 3751-5750 percentage changed from 16.2 to 17.79.
The med truck 5751-8500 percentage changed from 7.3 to 1.26.
The lite-heavy truck 8501-10000 percentage changed from 1.1 to 0.19.
The lite-heavy truck 10001-14000 percentage changed from 0.3 to 0.05.
The med-heavy truck 14001-33000 percentage changed from 1.0 to 0.17.
The heavy-heavy truck 33001-60000 percentage changed from 0.9 to 0.16.
The urban bus percentage changed from 0.2 to 0.22.
The motorcycle percentage changed from 1.6 to 1.76.
The school bus percentage changed from 0.1 to 0.11.
The motorhome percentage changed from 1.4 to 1.53.
The operational emission year changed from 2004 to 2010.
The operational winter selection item changed from 3 to 2.
The operational summer temperature changed from 90 to 70.
The operational summer selection item changed from 8 to 4.
The double counting internal work trip limit changed from to 409.704.
The double counting shopping trip limit changed from to 244.1325.
The double counting other trip limit changed from to 880.8636.
The travel mode environment settings changed from both to: both
The default/nodefault travel setting changed from nodefault to: nodefault
Side Walks/Paths: No Sidewalks
changed to: Side Walks/Paths: Complete Coverage
Street Trees Provide Shade: No Coverage
changed to:Street Trees Provide Shade: Moderate Coverage
Pedestrian Circulation Access: No Destinations
changed to:Pedestrian Circulation Access: Most Destinations
Visually Interesting Uses: No Uses Within Walking Distance
changed to:Visually Interesting Uses: Large Number and Variety
Street System Enhances Safety: No Streets
changed to: Street System Enhances Safety: Some Streets
Pedestrian Safety from Crime: No Degree of Safety
changed to:Pedestrian Safety from Crime: Moderate Degree of Safety
Visually Interesting Walking Routes: No Visual Interest
changed to:Visually Interesting Walking Routes: High Level
Transit Service: Dial-A-Ride or No Transit Service
changed to: Transit Service: 31-60 Minute Bus within 1/4 Mile
Interconnected Bikeways: No Bikeway Coverage
changed to: Interconnected Bikeways: Moderate Coverage
Bike Routes Provide Paved Shoulders: No Routes
changed to:Bike Routes Provide Paved Shoulders: Some Routes
Safe Vehicle Speed Limits: No Routes Provided
changed to:Safe Vehicle Speed Limits: Some Destinations
Safe School Routes: No Schools
changed to: Safe School Routes: Primary and Secondary Schools
Uses w/in Cycling Distance: No Uses w/in Cycling Distance
changed to:Uses w/in Cycling Distance: Large Number and Variety
Bike Parking Ordinance: No Ordinance or Unenforceable
changed to:Bike Parking Ordinance: Requires Unprotected Bike Racks
Mitigation measure Project Density Meets Transit Level of Service Requirements:6
has been changed from off to on.
Mitigation measure Provide Transit Shelters Benches:2
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Route Signs and Displays:0.5
has been changed from off to on.
Mitigation measure Provide Bus Turnouts:1
has been changed from off to on.
Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1
has been changed from off to on.
Mitigation measure Provide Direct Pedestrian Connections:1
has been changed from off to on.

Mitigation measure Provide Pedestrian Safety:0.5
has been changed from off to on.
Mitigation measure Provide Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Signalization and Signage:0.5
has been changed from off to on.
Mitigation measure Mixed Use Project (Commercial Oriented):1
has been changed from off to on.
Mitigation measure Floor Area Ratio 0.75 or Greater:1
has been changed from off to on.
Mitigation measure Provide Wide Sidewalks and Onsite Pedestrian Facilities:1
has been changed from off to on.
Mitigation measure Project Uses Parking Structures/Small Dispersed Lots:1
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Project Provides Shade Trees to Shade Sidewalks:0.5
has been changed from off to on.
Mitigation measure Project Provides Street Art and/or Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety Designs/Infrastructure at Crossings:0.5
has been changed from off to on.
Mitigation measure Articulated Storefront(s) Display Windows with Visual Interest:0.25
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Securre Bicycle Parking:1
has been changed from off to on.
Mitigation measure Many Frequently Needed Services Provided:5
has been changed from off to on.
Mitigation measuremitop5: Park and Ride Lots
has been changed from on to off.

URBEMIS 2002 For Windows 7.4.2

File Name: C:\Program Files\URBEMIS 2002 For Windows\Projects2k2\Pacific City - Reduced Project Alt
Project Name: 10261-00 Pacific City - Reduced Project Alternative
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	25.94	7.60	4.24	0.00	0.02
TOTALS (lbs/day, mitigated)	25.94	7.60	4.24	0.00	0.02

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	48.96	55.89	528.20	0.37	69.39
TOTALS (lbs/day, mitigated)	41.66	47.09	445.36	0.31	58.55

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	74.90	63.49	532.44	0.37	69.41
TOTALS (lbs/day, mitigated)	67.60	54.69	449.60	0.31	58.57

URBEMIS 2002 For Windows 7.4.2

File Name: C:\Program Files\URBEMIS 2002 For Windows\Projects2k2\Pacific City - Reduced Project Alt
Project Name: 10261-00 Pacific City - Reduced Project Alternative
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.57	7.58	3.13	-	0.01
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.13	0.02	1.10	0.00	0.00
Consumer Prdcts	25.24	-	-	-	-
TOTALS(lbs/day,unmitigated)	25.94	7.60	4.24	0.00	0.02

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Condo/townhouse general	12.20	13.74	133.54	0.10	18.12
Hotel	9.97	10.89	101.86	0.07	13.41
Regnl shop. center	25.01	29.04	271.66	0.19	34.95
General office building	1.78	2.22	21.14	0.02	2.92
TOTAL EMISSIONS (lbs/day)	48.96	55.89	528.20	0.37	69.39

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 70 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Condo/townhouse general	3.97 trips / dwelling units	516.00	2,048.52
Hotel	5.62 trips / rooms	400.00	2,248.00
Regnl shop. center	40.19 trips / 1000 sq. ft.	161.10	6,474.61
General office building	11.20 trips / 1000 sq. ft.	30.00	336.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	60.07	1.10	98.70	0.20
Light Truck < 3,750 lbs	16.69	2.00	96.00	2.00
Light Truck 3,751- 5,750	17.79	1.20	98.10	0.70
Med Truck 5,751- 8,500	1.26	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	0.19	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.05	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.17	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.16	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.22	0.00	50.00	50.00
Motorcycle	1.76	68.80	31.20	0.00
School Bus	0.11	0.00	0.00	100.00
Motor Home	1.53	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Regnl shop. center				2.0	1.0	97.0
General office building				35.0	17.5	47.5

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The area souce mitigation measure option switch changed from off to on.
The landscape year changed from 2004 to 2010.
New mitigation measure :Rsdntl Space Heat.
has been added.
New mitigation measure :Cmrcl Space Heat.
has been added.

Changes made to the default values for Operations

The pass by trips option switch changed from off to on.
The light auto percentage changed from 54.7 to 60.07.
The light truck < 3750 lbs percentage changed from 15.2 to 16.69.
The light truck 3751-5750 percentage changed from 16.2 to 17.79.
The med truck 5751-8500 percentage changed from 7.3 to 1.26.
The lite-heavy truck 8501-10000 percentage changed from 1.1 to 0.19.
The lite-heavy truck 10001-14000 percentage changed from 0.3 to 0.05.
The med-heavy truck 14001-33000 percentage changed from 1.0 to 0.17.
The heavy-heavy truck 33001-60000 percentage changed from 0.9 to 0.16.
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The motorcycle percentage changed from 1.6 to 1.76.
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The operational emission year changed from 2004 to 2010.
The operational winter selection item changed from 3 to 2.
The operational summer temperature changed from 90 to 70.
The operational summer selection item changed from 8 to 4.
The double counting internal work trip limit changed from to 359.49218.
The double counting shopping trip limit changed from to 179.74609.
The double counting other trip limit changed from to 880.8636.
The travel mode environment settings changed from both to: both
The default/nodefault travel setting changed from nodefault to: nodefault
Side Walks/Paths: No Sidewalks
changed to: Side Walks/Paths: Complete Coverage
Street Trees Provide Shade: No Coverage
changed to:Street Trees Provide Shade: Moderate Coverage
Pedestrian Circulation Access: No Destinations
changed to:Pedestrian Circulation Access: Most Destinations
Visually Interesting Uses: No Uses Within Walking Distance
changed to:Visually Interesting Uses: Large Number and Variety
Street System Enhances Safety: No Streets
changed to: Street System Enhances Safety: Some Streets
Pedestrian Safety from Crime: No Degree of Safety
changed to:Pedestrian Safety from Crime: Moderate Degree of Safety
Visually Interesting Walking Routes: No Visual Interest
changed to:Visually Interesting Walking Routes: High Level
Transit Service: Dial-A-Ride or No Transit Service
changed to: Transit Service: 31-60 Minute Bus within 1/4 Mile
Interconnected Bikeways: No Bikeway Coverage
changed to: Interconnected Bikeways: Moderate Coverage
Bike Routes Provide Paved Shoulders: No Routes
changed to:Bike Routes Provide Paved Shoulders: Some Routes
Safe Vehicle Speed Limits: No Routes Provided
changed to:Safe Vehicle Speed Limits: Some Destinations
Safe School Routes: No Schools
changed to: Safe School Routes: Primary and Secondary Schools
Uses w/in Cycling Distance: No Uses w/in Cycling Distance
changed to:Uses w/in Cycling Distance: Large Number and Variety
Bike Parking Ordinance: No Ordinance or Unenforceable
changed to:Bike Parking Ordinance: Requires Unprotected Bike Racks
Mitigation measure Project Density Meets Transit Level of Service Requirements:6
has been changed from off to on.
Mitigation measure Provide Transit Shelters Benches:2
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Route Signs and Displays:0.5
has been changed from off to on.
Mitigation measure Provide Bus Turnouts:1
has been changed from off to on.
Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1
has been changed from off to on.
Mitigation measure Provide Direct Pedestrian Connections:1
has been changed from off to on.

Mitigation measure Provide Pedestrian Safety:0.5
has been changed from off to on.
Mitigation measure Provide Street Furniture:0.5
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Mitigation measure Provide Street Lighting:0.5
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Mitigation measure Floor Area Ratio 0.75 or Greater:1
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Mitigation measure Provide Wide Sidewalks and Onsite Pedestrian Facilities:1
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Mitigation measure Project Uses Parking Structures/Small Dispersed Lots:1
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Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Project Provides Shade Trees to Shade Sidewalks:0.5
has been changed from off to on.
Mitigation measure Project Provides Street Art and/or Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety Designs/Infrastructure at Crossings:0.5
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Mitigation measure Articulated Storefront(s) Display Windows with Visual Interest:0.25
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Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
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Mitigation measure Provide Securre Bicycle Parking:1
has been changed from off to on.
Mitigation measure Many Frequently Needed Services Provided:5
has been changed from off to on.
Mitigation measuremitop5: Park and Ride Lots
has been changed from on to off.

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

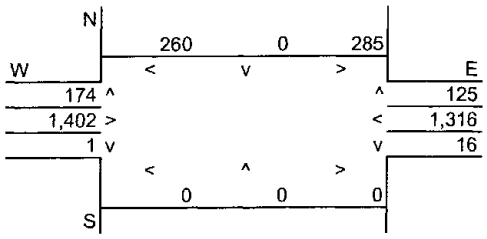
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

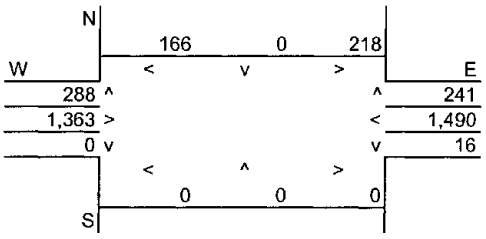
Intersection: Goldenwest St./Pacific Coast Highway
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Goldenwest Street	At Grade	4	15	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	15	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	844	N-S Road:	913
E-W Road:	3,153	E-W Road:	3,328

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	844	12.31	0.27	0.23	0.18
East-West Road	6.1	4.9	3.5	3,153	12.31	2.37	1.90	1.36
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	913	9.33	0.22	0.19	0.14
East-West Road	6.1	4.9	3.5	3,328	9.33	1.89	1.52	1.09

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	10.6	10.1	6.4
50 Feet from Roadway Edge	10.1	9.7	6.1
100 Feet from Roadway Edge	9.5	9.2	5.7

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

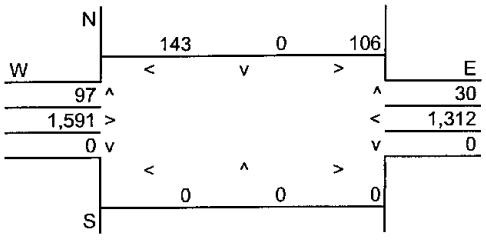
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

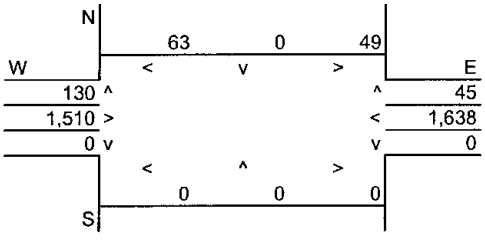
Intersection: 17th St./Pacific Coast Highway
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	17th Street	At Grade	2	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	376	N-S Road:	287
E-W Road:	3,143	E-W Road:	3,341

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	376	9.33	0.09	0.08	0.06
East-West Road	6.1	4.9	3.5	3,143	9.33	1.79	1.44	1.03
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	287	9.33	0.07	0.06	0.05
East-West Road	6.1	4.9	3.5	3,341	9.33	1.90	1.53	1.09

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	9.9	10.0	6.0
50 Feet from Roadway Edge	9.5	9.6	5.7
100 Feet from Roadway Edge	9.1	9.1	5.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

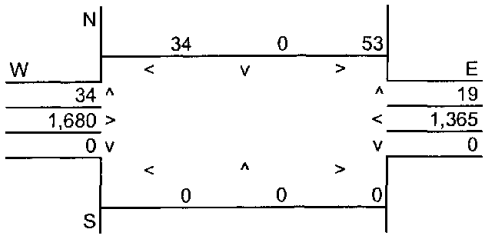
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

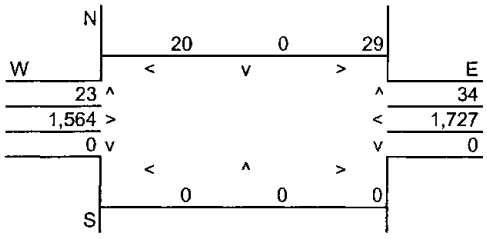
Intersection: 9th St./Pacific Coast Highway
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	9th Street	At Grade	2	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	140	N-S Road:	106
E-W Road:	3,117	E-W Road:	3,354

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	140	9.33	0.04	0.03	0.02
East-West Road	6.1	4.9	3.5	3,117	9.33	1.77	1.43	1.02
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	106	9.33	0.03	0.02	0.02
East-West Road	6.1	4.9	3.5	3,354	9.33	1.91	1.53	1.10

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	9.8	9.9	6.0
50 Feet from Roadway Edge	9.5	9.6	5.7
100 Feet from Roadway Edge	9.0	9.1	5.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

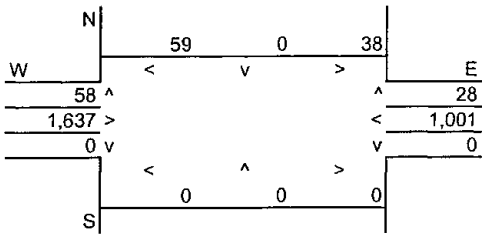
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

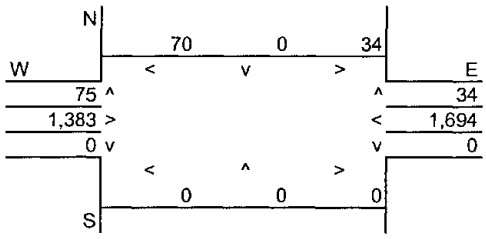
Intersection: 6th St./Pacific Coast Highway
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	6th Street	At Grade	2	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	183	N-S Road:	213
E-W Road:	2,755	E-W Road:	3,222

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	183	9.33	0.05	0.04	0.03
East-West Road	6.1	4.9	3.5	2,755	9.33	1.57	1.26	0.90
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	213	9.33	0.05	0.04	0.03
East-West Road	6.1	4.9	3.5	3,222	9.33	1.83	1.47	1.05

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	9.6	9.9	5.9
50 Feet from Roadway Edge	9.3	9.5	5.7
100 Feet from Roadway Edge	8.9	9.1	5.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

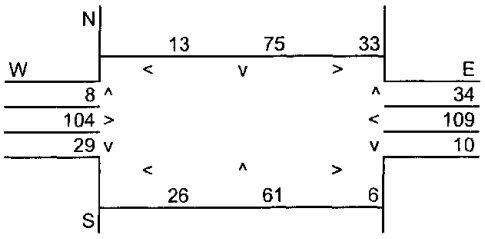
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

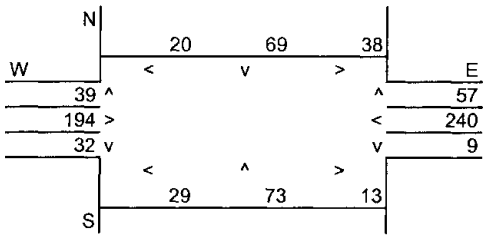
Intersection: Main St./6th St.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Main Street	At Grade	2	20	20
East-West Roadway:	6th St.	At Grade	2	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	224	N-S Road:	296
E-W Road:	296	E-W Road:	554

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	224	9.33	0.06	0.05	0.04
East-West Road	7.6	5.7	4.0	296	9.33	0.21	0.16	0.11
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	296	9.33	0.07	0.06	0.05
East-West Road	7.6	5.7	4.0	554	9.33	0.39	0.29	0.21

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	8.3	8.5	4.9
50 Feet from Roadway Edge	8.2	8.4	4.8
100 Feet from Roadway Edge	8.1	8.3	4.8

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

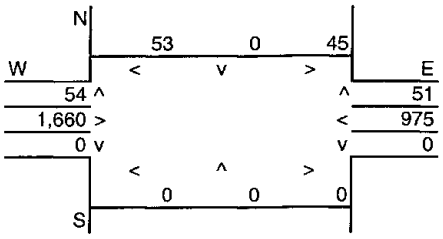
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

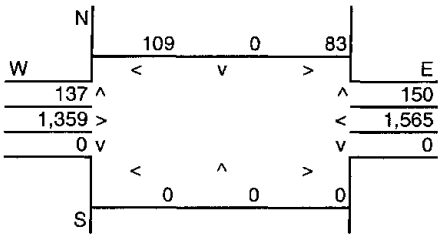
Intersection: Main St./PCH
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Main Street	At Grade	2	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	203	N-S Road:	479
E-W Road:	2,742	E-W Road:	3,170

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	203	9.33	0.05	0.04	0.03
East-West Road	6.1	4.9	3.5	2,742	9.33	1.56	1.25	0.90
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	479	9.33	0.12	0.10	0.08
East-West Road	6.1	4.9	3.5	3,170	9.33	1.80	1.45	1.04

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentrati

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	9.6	9.9	5.9
50 Feet from Roadway Edge	9.3	9.5	5.7
100 Feet from Roadway Edge	8.9	9.1	5.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

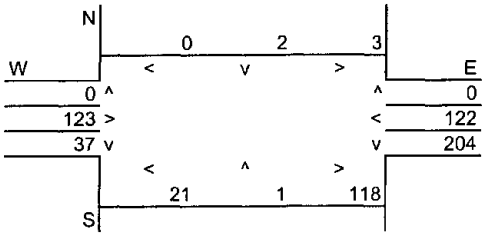
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

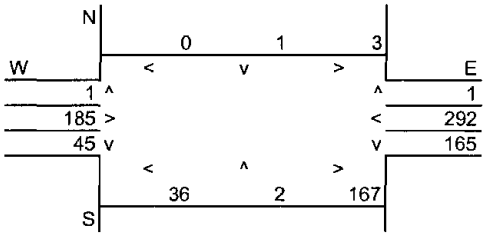
Intersection: 1st St./Atlanta Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	1st Street	At Grade	2	10	10
East-West Roadway:	Atlanta Avenue	At Grade	2	10	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	383	N-S Road:	416
E-W Road:	570	E-W Road:	813

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	383	18.24	0.19	0.15	0.12
East-West Road	7.6	5.7	4.0	570	18.24	0.79	0.59	0.42
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	416	18.24	0.20	0.17	0.13
East-West Road	7.6	5.7	4.0	813	18.24	1.13	0.85	0.59

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	9.0	9.3	5.5
50 Feet from Roadway Edge	8.7	9.0	5.3
100 Feet from Roadway Edge	8.5	8.7	5.1

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

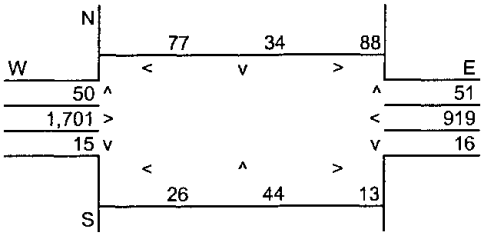
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

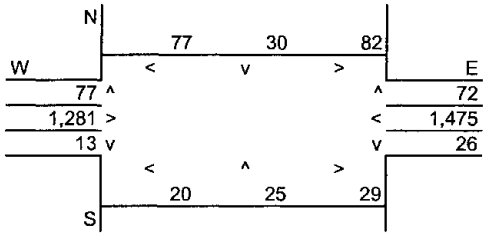
Intersection: 1st St./Pacific Coast Highway
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	1st Street	At Grade	2	20	15
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	344	N-S Road:	363
E-W Road:	2,788	E-W Road:	2,965

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	344	9.33	0.09	0.07	0.05
East-West Road	6.1	4.9	3.5	2,788	9.33	1.59	1.28	0.91
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	363	12.31	0.12	0.10	0.08
East-West Road	6.1	4.9	3.5	2,965	12.31	2.23	1.79	1.28

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	9.7	10.3	6.2
50 Feet from Roadway Edge	9.3	9.9	5.9
100 Feet from Roadway Edge	9.0	9.4	5.5

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

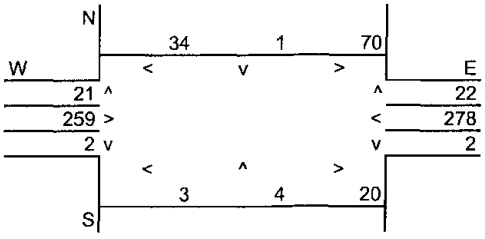
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

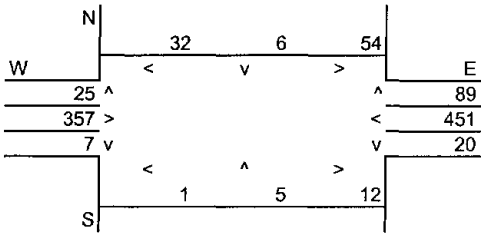
Intersection: Huntington St./Atlanta Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Huntington Street	At Grade	2	10	10
East-West Roadway:	Atlanta Avenue	At Grade	2	10	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	152	N-S Road:	211
E-W Road:	651	E-W Road:	983

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	152	18.24	0.07	0.06	0.05
East-West Road	7.6	5.7	4.0	651	18.24	0.90	0.68	0.48
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	211	18.24	0.10	0.08	0.07
East-West Road	7.6	5.7	4.0	983	18.24	1.36	1.02	0.72

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	9.0	9.5	5.6
50 Feet from Roadway Edge	8.7	9.1	5.4
100 Feet from Roadway Edge	8.5	8.8	5.1

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

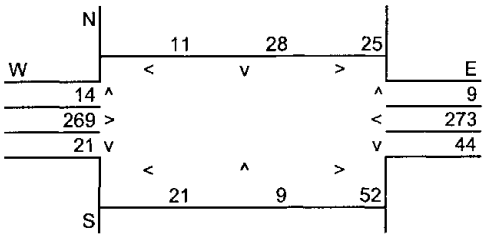
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

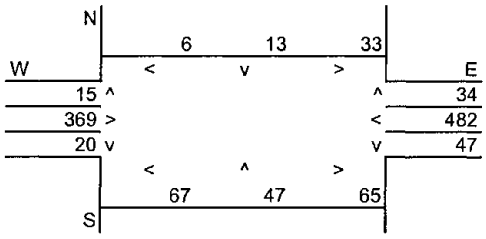
Intersection:	Delware St./Atlanta Ave.
Analysis Condition:	Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Deleware Street	At Grade	4	10	10
East-West Roadway:	Atlanta Avenue	At Grade	4	10	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	175	N-S Road:	259
E-W Road:	672	E-W Road:	1,030

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	175	18.24	0.08	0.07	0.05
East-West Road	7.0	5.4	3.8	672	18.24	0.86	0.66	0.47
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	259	18.24	0.12	0.10	0.08
East-West Road	7.0	5.4	3.8	1,030	18.24	1.32	1.01	0.71

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	8.9	9.4	5.6
50 Feet from Roadway Edge	8.7	9.1	5.4
100 Feet from Roadway Edge	8.5	8.8	5.2

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

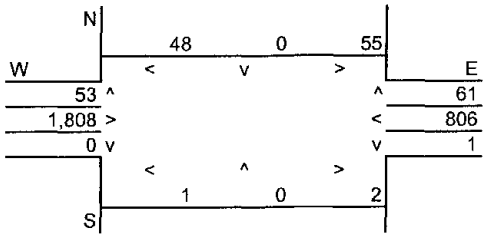
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

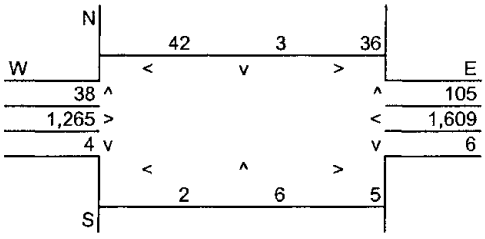
Intersection: Huntington St./PCH
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Huntington Street	At Grade	2	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	217	N-S Road:	230
E-W Road:	2,733	E-W Road:	3,026

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	217	9.33	0.05	0.04	0.03
East-West Road	6.1	4.9	3.5	2,733	9.33	1.56	1.25	0.89
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	230	9.33	0.06	0.05	0.04
East-West Road	6.1	4.9	3.5	3,026	9.33	1.72	1.38	0.99

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	9.6	9.8	5.8
50 Feet from Roadway Edge	9.3	9.4	5.6
100 Feet from Roadway Edge	8.9	9.0	5.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

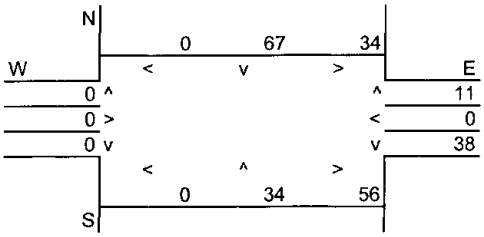
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

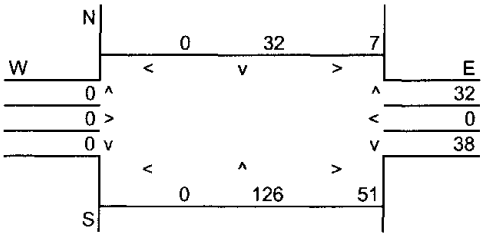
Intersection: Huntington St./Pacific View Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Huntington Street	At Grade	2	10	10
East-West Roadway:	Pacific View Avenue	At Grade	2	10	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	195	N-S Road:	247
E-W Road:	139	E-W Road:	128

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	195	18.24	0.27	0.20	0.14
East-West Road	2.7	2.2	1.7	139	18.24	0.07	0.06	0.04
P.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	247	18.24	0.34	0.26	0.18
East-West Road	2.7	2.2	1.7	128	18.24	0.06	0.05	0.04

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	8.3	8.4	4.9
50 Feet from Roadway Edge	8.3	8.3	4.8
100 Feet from Roadway Edge	8.2	8.2	4.8

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

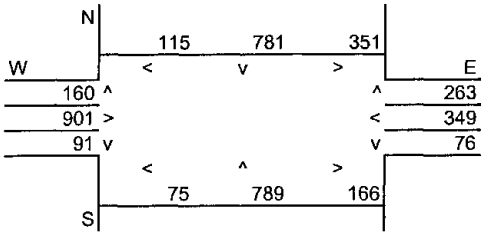
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

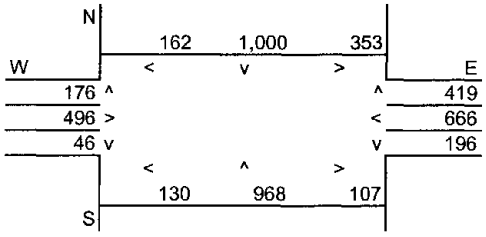
Intersection: Beach Blvd./Adams Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	15	15
East-West Roadway:	Adams Avenue	At Grade	4	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	2,459	N-S Road:	3,078
E-W Road:	2,106	E-W Road:	2,237

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	2,459	12.31	1.85	1.48	1.06
East-West Road	2.6	2.2	1.7	2,106	12.31	0.67	0.57	0.44
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	3,078	12.31	2.31	1.86	1.33
East-West Road	2.6	2.2	1.7	2,237	12.31	0.72	0.61	0.47

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	10.5	11.0	6.7
50 Feet from Roadway Edge	10.1	10.5	6.3
100 Feet from Roadway Edge	9.5	9.8	5.9

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

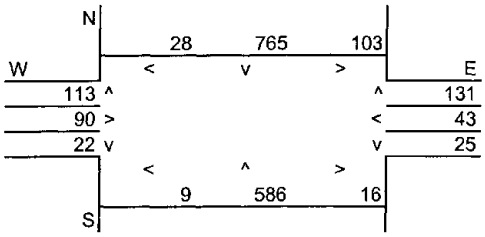
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

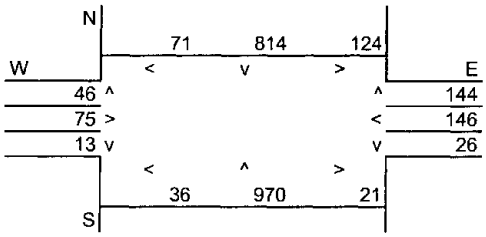
Intersection: Beach Blvd./Indianapolis Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	20	20
East-West Roadway:	Indianapolis Avenue	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,726	N-S Road:	2,169
E-W Road:	408	E-W Road:	536

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	1,726	9.33	0.98	0.79	0.56
East-West Road	2.6	2.2	1.7	408	9.33	0.10	0.08	0.06
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	2,169	9.33	1.23	0.99	0.71
East-West Road	2.6	2.2	1.7	536	9.33	0.13	0.11	0.09

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	9.1	9.4	5.6
50 Feet from Roadway Edge	8.9	9.1	5.4
100 Feet from Roadway Edge	8.6	8.8	5.2

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

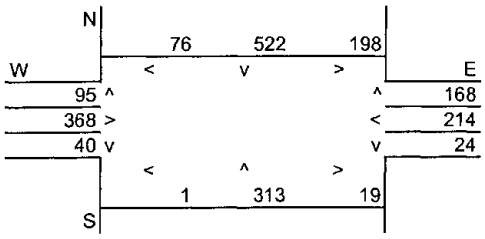
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

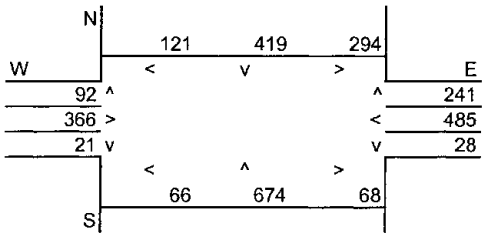
Intersection: Beach Blvd./Atlanta Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	20	20
East-West Roadway:	Atlanta Avenue	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,372	N-S Road:	1,841
E-W Road:	991	E-W Road:	1,482

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	1,372	9.33	0.78	0.63	0.45
East-West Road	2.6	2.2	1.7	991	9.33	0.24	0.20	0.16
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	1,841	9.33	1.05	0.84	0.60
East-West Road	2.6	2.2	1.7	1,482	9.33	0.36	0.30	0.24

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	9.0	9.4	5.6
50 Feet from Roadway Edge	8.8	9.1	5.4
100 Feet from Roadway Edge	8.6	8.8	5.2

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

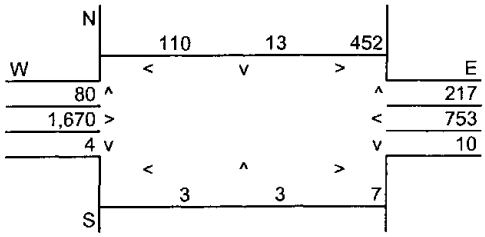
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

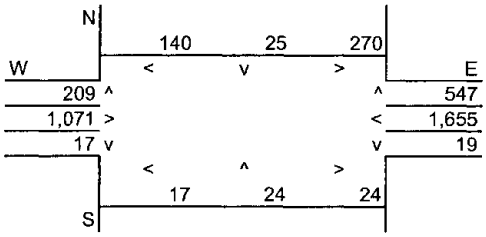
Intersection: Beach Blvd./PCH
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	875	N-S Road:	1,215
E-W Road:	3,109	E-W Road:	3,586

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	875	9.33	0.19	0.16	0.14
East-West Road	6.1	4.9	3.5	3,109	9.33	1.77	1.42	1.02
P.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	1,215	9.33	0.26	0.23	0.19
East-West Road	6.1	4.9	3.5	3,586	9.33	2.04	1.64	1.17

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	10.0	10.3	6.2
50 Feet from Roadway Edge	9.6	9.9	5.9
100 Feet from Roadway Edge	9.2	9.4	5.6

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

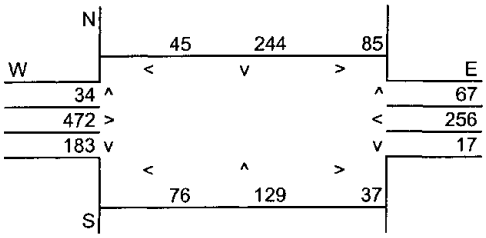
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

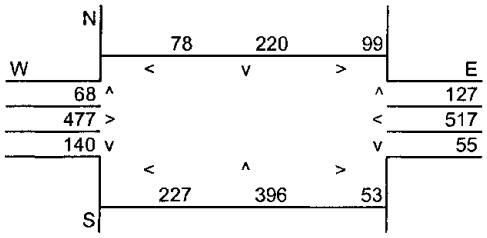
Intersection: NewlandSt./Atlanta Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	4	20	20
East-West Roadway:	Atlanta Ave.	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	686	N-S Road:	1,091
E-W Road:	1,066	E-W Road:	1,507

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	686	9.33	0.17	0.14	0.11
East-West Road	7.0	5.4	3.8	1,066	9.33	0.70	0.54	0.38
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	1,091	9.33	0.26	0.22	0.17
East-West Road	7.0	5.4	3.8	1,507	9.33	0.98	0.76	0.53

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	8.9	9.2	5.5
50 Feet from Roadway Edge	8.7	9.0	5.3
100 Feet from Roadway Edge	8.5	8.7	5.1

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

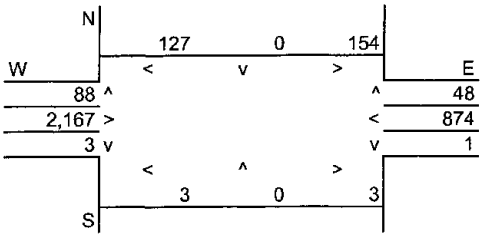
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

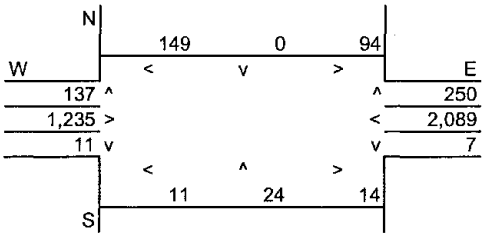
Intersection:	NewlandSt./PCH
Analysis Condition:	Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	4	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	417	N-S Road:	654
E-W Road:	3,262	E-W Road:	3,689

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	417	9.33	0.10	0.09	0.07
East-West Road	6.1	4.9	3.5	3,262	9.33	1.86	1.49	1.07
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	654	9.33	0.16	0.13	0.10
East-West Road	6.1	4.9	3.5	3,689	9.33	2.10	1.69	1.21

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	10.0	10.3	6.2
50 Feet from Roadway Edge	9.6	9.8	5.9
100 Feet from Roadway Edge	9.1	9.3	5.5

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

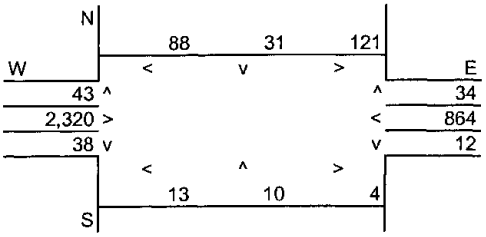
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

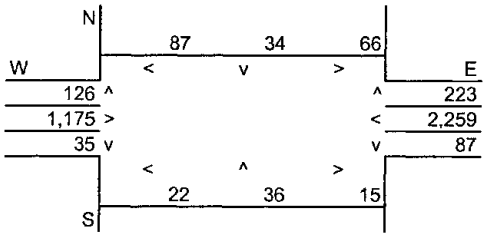
Intersection: Magnolia St./PCH
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Magnolia Street	At Grade	4	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	327	N-S Road:	572
E-W Road:	3,366	E-W Road:	3,825

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	327	9.33	0.08	0.07	0.05
East-West Road	6.1	4.9	3.5	3,366	9.33	1.92	1.54	1.10
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	572	9.33	0.14	0.12	0.09
East-West Road	6.1	4.9	3.5	3,825	9.33	2.18	1.75	1.25

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	10.0	10.3	6.2
50 Feet from Roadway Edge	9.6	9.9	5.9
100 Feet from Roadway Edge	9.2	9.3	5.5

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

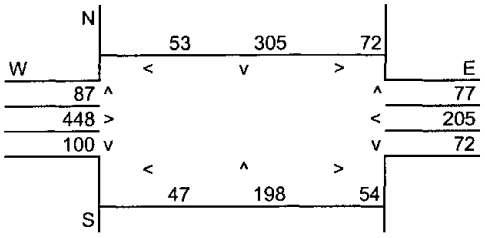
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

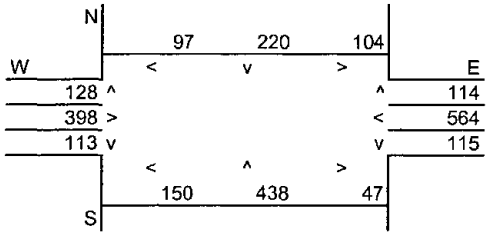
Intersection: Magnolia St./Atlanta Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Magnolia Street	At Grade	4	20	20
East-West Roadway:	Atlanta Avenue	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	792	N-S Road:	1,101
E-W Road:	940	E-W Road:	1,450

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	792	9.33	0.19	0.16	0.13
East-West Road	7.0	5.4	3.8	940	9.33	0.61	0.47	0.33
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	1,101	9.33	0.27	0.23	0.17
East-West Road	7.0	5.4	3.8	1,450	9.33	0.95	0.73	0.51

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	8.8	9.2	5.5
50 Feet from Roadway Edge	8.6	9.0	5.3
100 Feet from Roadway Edge	8.5	8.7	5.1

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

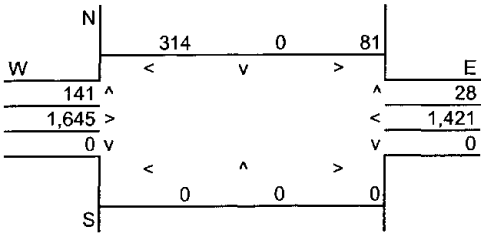
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

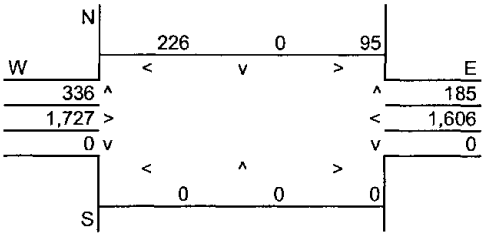
Intersection: PCH/Seapointe Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Seapointe Avenue	At Grade	4	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	564	N-S Road:	842
E-W Road:	3,521	E-W Road:	3,895

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	564	9.33	0.14	0.12	0.09
East-West Road	7.0	5.4	3.8	3,521	9.33	2.30	1.77	1.25
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	842	9.33	0.20	0.17	0.13
East-West Road	7.0	5.4	3.8	3,895	9.33	2.54	1.96	1.38

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	10.4	10.7	6.5
50 Feet from Roadway Edge	9.9	10.1	6.1
100 Feet from Roadway Edge	9.3	9.5	5.7

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

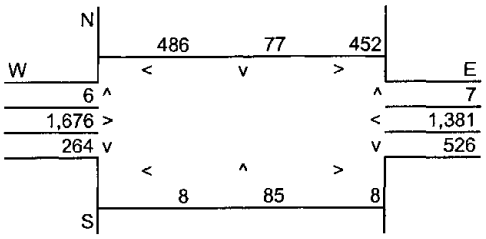
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

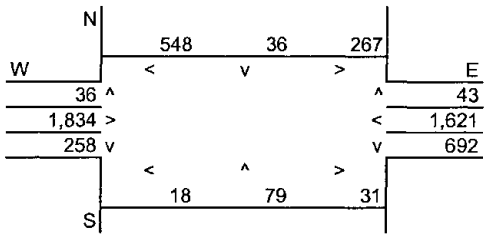
Intersection: PCH/Warner Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Warner Avenue	At Grade	4	15	10
East-West Roadway:	Pacific Coast Highway	At Grade	4	15	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,113	N-S Road:	1,114
E-W Road:	4,050	E-W Road:	4,488

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	1,113	12.31	0.36	0.30	0.23
East-West Road	7.0	5.4	3.8	4,050	12.31	3.49	2.69	1.89
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	1,114	18.24	0.53	0.45	0.35
East-West Road	7.0	5.4	3.8	4,488	18.24	5.73	4.42	3.11

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	11.8	14.3	9.0
50 Feet from Roadway Edge	11.0	12.9	8.0
100 Feet from Roadway Edge	10.1	11.5	7.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

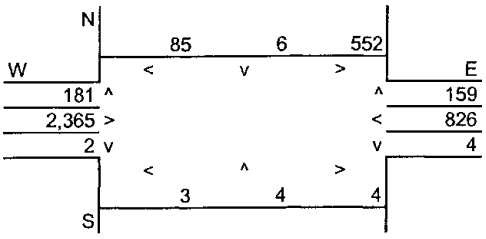
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

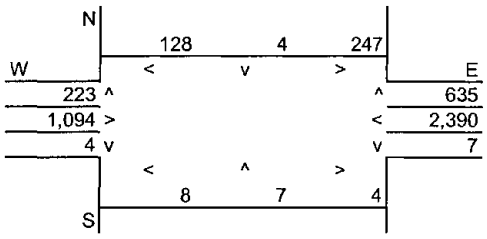
Intersection: PCH/Brookhurst St.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Brookhurst Street	At Grade	4	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	987	N-S Road:	1,244
E-W Road:	3,910	E-W Road:	4,377

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	987	9.33	0.24	0.20	0.16
East-West Road	6.1	4.9	3.5	3,910	9.33	2.23	1.79	1.28
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	1,244	9.33	0.30	0.26	0.20
East-West Road	6.1	4.9	3.5	4,377	9.33	2.49	2.00	1.43

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	10.5	10.8	6.6
50 Feet from Roadway Edge	10.0	10.3	6.2
100 Feet from Roadway Edge	9.4	9.6	5.7

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

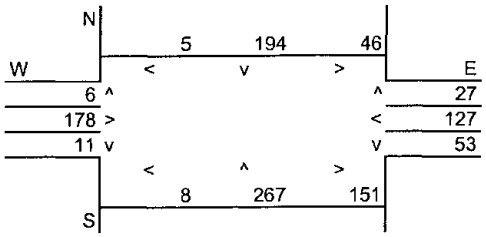
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

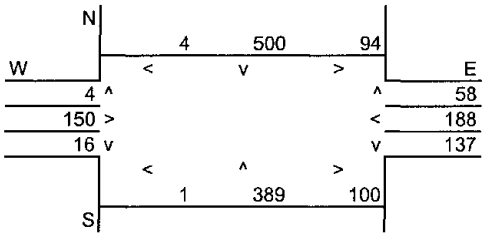
Intersection: Main St./Adams Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Main Street	At Grade	2	20	20
East-West Roadway:	Adams Avenue	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	684	N-S Road:	1,143
E-W Road:	582	E-W Road:	727

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	684	9.33	0.49	0.36	0.26
East-West Road	2.6	2.2	1.7	582	9.33	0.14	0.12	0.09
P.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	1,143	9.33	0.81	0.61	0.43
East-West Road	2.6	2.2	1.7	727	9.33	0.18	0.15	0.12

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	8.6	9.0	5.3
50 Feet from Roadway Edge	8.5	8.8	5.1
100 Feet from Roadway Edge	8.3	8.5	5.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

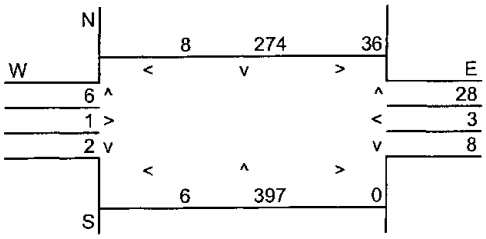
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

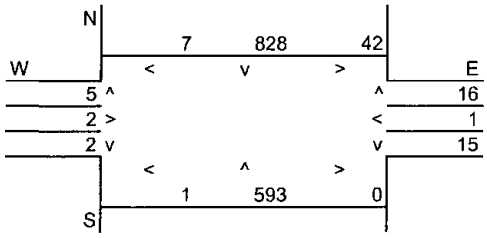
Intersection: Main St./Utica Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Main Street	At Grade	2	20	20
East-West Roadway:	Utica Avenue	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	749	N-S Road:	1,491
E-W Road:	76	E-W Road:	76

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	749	9.33	0.53	0.40	0.28
East-West Road	2.6	2.2	1.7	76	9.33	0.02	0.02	0.01
P.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	1,491	9.33	1.06	0.79	0.56
East-West Road	2.6	2.2	1.7	76	9.33	0.02	0.02	0.01

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	8.5	9.1	5.4
50 Feet from Roadway Edge	8.4	8.8	5.2
100 Feet from Roadway Edge	8.3	8.6	5.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

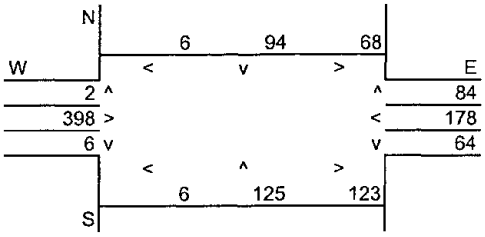
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

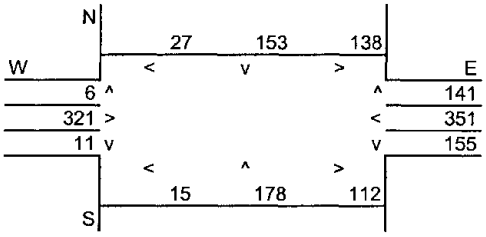
Intersection: Lake St./Adams Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Lake Street	At Grade	2	20	20
East-West Roadway:	Adams Avenue	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	418	N-S Road:	643
E-W Road:	915	E-W Road:	1,218

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	418	9.33	0.11	0.09	0.07
East-West Road	7.0	5.4	3.8	915	9.33	0.60	0.46	0.32
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	643	9.33	0.16	0.13	0.10
East-West Road	7.0	5.4	3.8	1,218	9.33	0.80	0.61	0.43

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	8.7	9.0	5.3
50 Feet from Roadway Edge	8.5	8.7	5.1
100 Feet from Roadway Edge	8.4	8.5	5.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

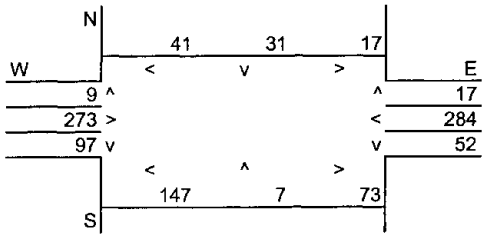
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

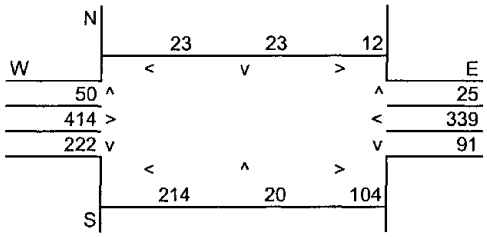
Intersection: Lake St./Yorktown Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Lake Street	At Grade	2	20	20
East-West Roadway:	Yorktown	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	407	N-S Road:	674
E-W Road:	851	E-W Road:	1,262

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	407	9.33	0.10	0.08	0.06
East-West Road	7.0	5.4	3.8	851	9.33	0.56	0.43	0.30
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	674	9.33	0.17	0.14	0.11
East-West Road	7.0	5.4	3.8	1,262	9.33	0.82	0.64	0.45

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	8.7	9.0	5.3
50 Feet from Roadway Edge	8.5	8.8	5.1
100 Feet from Roadway Edge	8.4	8.6	5.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

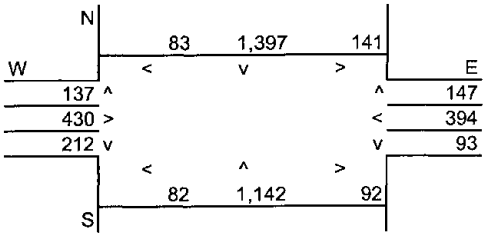
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

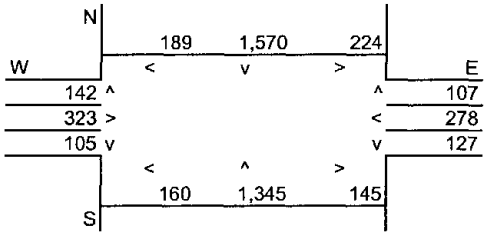
Intersection: Beach Blvd./Yorktown Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	15	15
East-West Roadway:	Yorktown Avenue	At Grade	4	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	3,047	N-S Road:	3,577
E-W Road:	1,338	E-W Road:	1,204

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	3,047	12.31	2.29	1.84	1.31
East-West Road	2.6	2.2	1.7	1,338	12.31	0.43	0.36	0.28
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	3,577	12.31	2.69	2.16	1.54
East-West Road	2.6	2.2	1.7	1,204	12.31	0.39	0.33	0.25

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	10.7	11.1	6.7
50 Feet from Roadway Edge	10.2	10.5	6.3
100 Feet from Roadway Edge	9.6	9.8	5.9

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

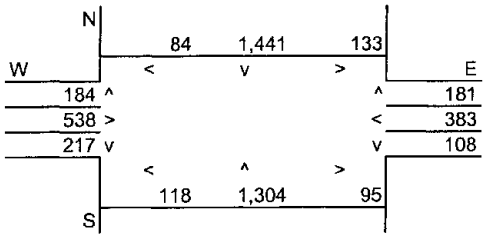
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

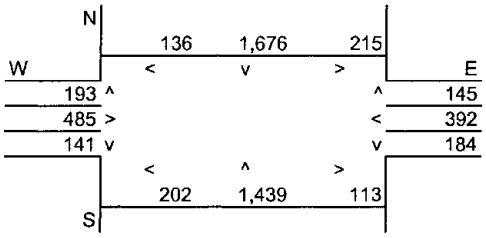
Intersection: Beach Blvd./Garfield Ave.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	15	15
East-West Roadway:	Garfield Avenue	At Grade	4	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	3,327	N-S Road:	3,804
E-W Road:	1,524	E-W Road:	1,549

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	3,327	12.31	2.50	2.01	1.43
East-West Road	2.6	2.2	1.7	1,524	12.31	0.49	0.41	0.32
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	3,804	12.31	2.86	2.29	1.64
East-West Road	2.6	2.2	1.7	1,549	12.31	0.50	0.42	0.32

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	11.0	11.4	6.9
50 Feet from Roadway Edge	10.4	10.7	6.5
100 Feet from Roadway Edge	9.8	10.0	6.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

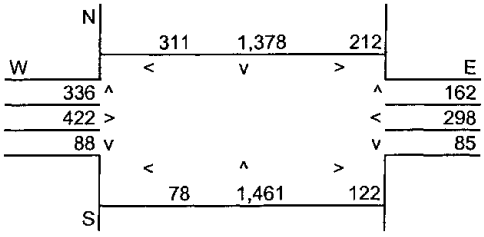
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	8.0
Background 8-hour CO Concentration (ppm):	4.6
Persistence Factor:	0.7
Analysis Year:	2002

Roadway Data

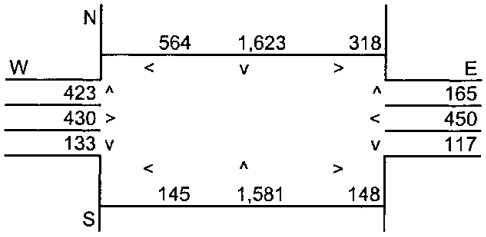
Intersection: Beach Blvd./Ellis Ave.-Main St.
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	15	15
East-West Roadway:	Ellis Avenue - Main Street	At Grade	2	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	3,860	N-S Road:	4,674
E-W Road:	1,533	E-W Road:	2,145

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	3,860	12.31	2.90	2.33	1.66
East-West Road	2.7	2.2	1.7	1,533	12.31	0.51	0.42	0.32
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	4,674	12.31	3.51	2.82	2.01
East-West Road	2.7	2.2	1.7	2,145	12.31	0.71	0.58	0.45

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	11.4	12.2	7.6
50 Feet from Roadway Edge	10.7	11.4	7.0
100 Feet from Roadway Edge	10.0	10.5	6.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

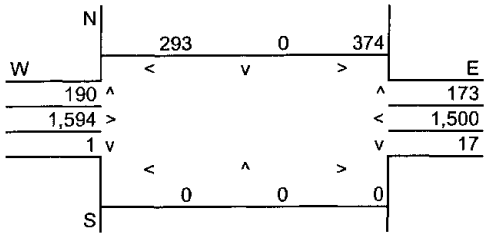
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

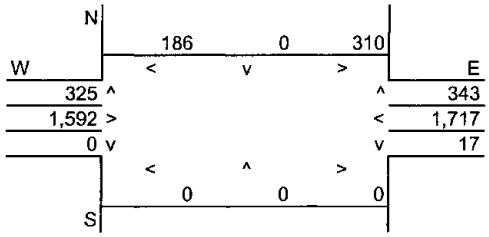
Intersection: Goldenwest St./Pacific Coast Highway
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Goldenwest Street	At Grade	4	20	15
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,030	N-S Road:	1,164
E-W Road:	3,658	E-W Road:	3,979

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	1,030	5.52	0.15	0.13	0.10
East-West Road	6.1	4.9	3.5	3,658	5.52	1.23	0.99	0.71
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	1,164	7.30	0.22	0.19	0.14
East-West Road	6.1	4.9	3.5	3,979	7.30	1.77	1.42	1.02

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.2	7.8	6.1
50 Feet from Roadway Edge	6.9	7.4	5.8
100 Feet from Roadway Edge	6.6	7.0	5.5

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

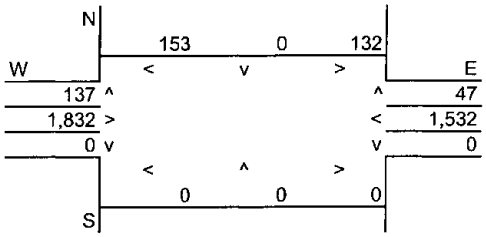
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

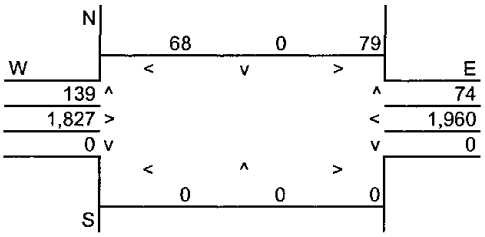
Intersection: 17th St./Pacific Coast Highway
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	17th Street	At Grade	2	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	469	N-S Road:	360
E-W Road:	3,654	E-W Road:	3,994

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	469	5.52	0.07	0.06	0.04
East-West Road	6.1	4.9	3.5	3,654	5.52	1.23	0.99	0.71
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	360	5.52	0.05	0.04	0.03
East-West Road	6.1	4.9	3.5	3,994	5.52	1.34	1.08	0.77

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.1	7.2	5.7
50 Feet from Roadway Edge	6.8	6.9	5.5
100 Feet from Roadway Edge	6.5	6.6	5.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

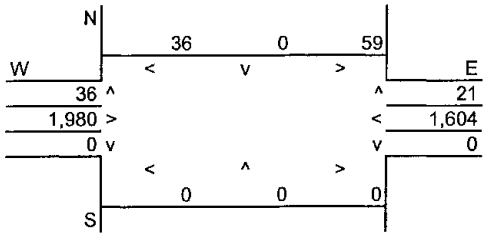
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

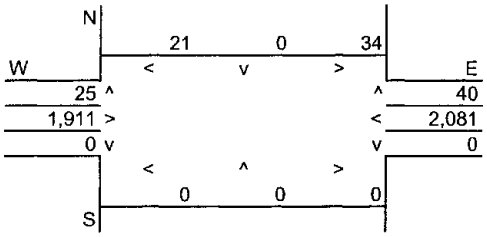
Intersection: 9th St./Pacific Coast Highway
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	9th Street	At Grade	2	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	152	N-S Road:	120
E-W Road:	3,664	E-W Road:	4,066

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	152	5.52	0.02	0.02	0.01
East-West Road	6.1	4.9	3.5	3,664	5.52	1.23	0.99	0.71
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	120	5.52	0.02	0.01	0.01
East-West Road	6.1	4.9	3.5	4,066	5.52	1.37	1.10	0.79

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.1	7.2	5.7
50 Feet from Roadway Edge	6.8	6.9	5.5
100 Feet from Roadway Edge	6.5	6.6	5.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

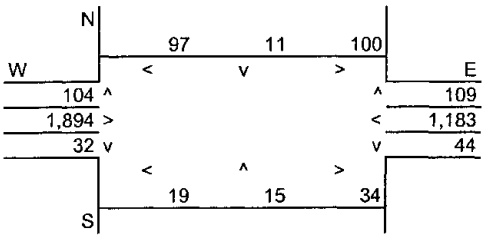
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

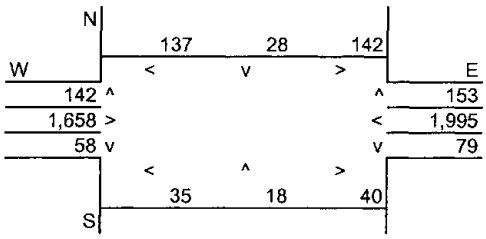
Intersection: 6th St./Pacific Coast Highway
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	6th Street	At Grade	2	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	436	N-S Road:	620
E-W Road:	3,364	E-W Road:	4,067

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	436	5.52	0.06	0.05	0.04
East-West Road	6.1	4.9	3.5	3,364	5.52	1.13	0.91	0.65
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	620	5.52	0.09	0.08	0.06
East-West Road	6.1	4.9	3.5	4,067	5.52	1.37	1.10	0.79

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.0	7.3	5.7
50 Feet from Roadway Edge	6.8	7.0	5.5
100 Feet from Roadway Edge	6.5	6.6	5.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

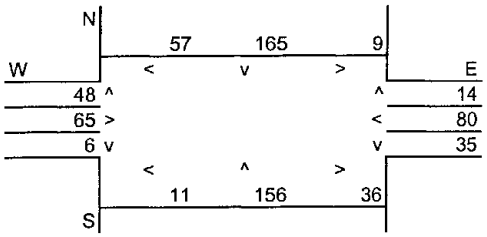
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

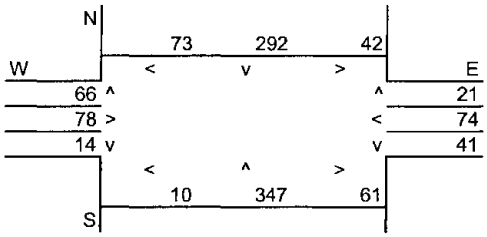
Intersection: Main St./6th St.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Main Street	At Grade	2	20	20
East-West Roadway:	6th St.	At Grade	2	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	449	N-S Road:	841
E-W Road:	267	E-W Road:	317

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	449	5.52	0.19	0.14	0.10
East-West Road	2.7	2.2	1.7	267	5.52	0.04	0.03	0.03
P.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	841	5.52	0.35	0.26	0.19
East-West Road	2.7	2.2	1.7	317	5.52	0.05	0.04	0.03

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.0	6.2	5.0
50 Feet from Roadway Edge	6.0	6.1	4.9
100 Feet from Roadway Edge	5.9	6.0	4.9

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

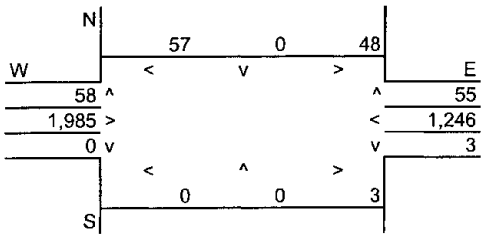
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

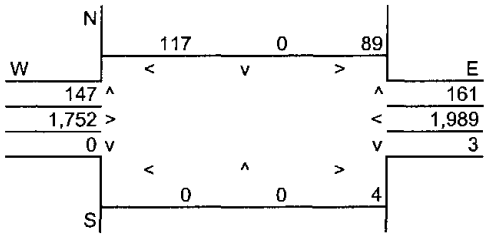
Intersection: Main St./PCH
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Main Street	At Grade	2	20	15
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	218	N-S Road:	514
E-W Road:	3,346	E-W Road:	4,005

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	218	5.52	0.03	0.03	0.02
East-West Road	6.1	4.9	3.5	3,346	5.52	1.13	0.91	0.65
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	514	7.30	0.10	0.08	0.06
East-West Road	6.1	4.9	3.5	4,005	7.30	1.78	1.43	1.02

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.0	7.7	6.0
50 Feet from Roadway Edge	6.7	7.3	5.8
100 Feet from Roadway Edge	6.5	6.9	5.5

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

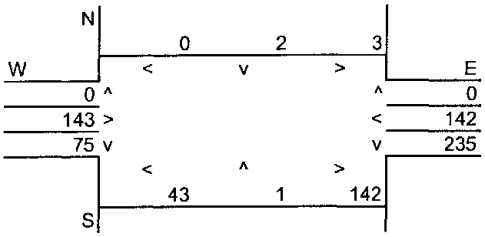
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

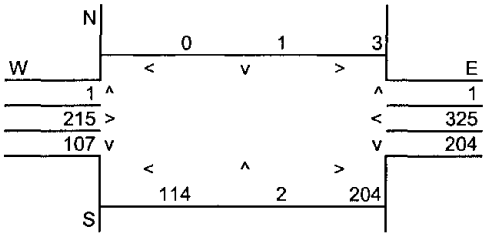
Intersection: 1st St./Atlanta Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	1st Street	At Grade	4	10	10
East-West Roadway:	Atlanta Avenue	At Grade	4	10	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	498	N-S Road:	632
E-W Road:	665	E-W Road:	952

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	498	10.78	0.14	0.12	0.09
East-West Road	7.0	5.4	3.8	665	10.78	0.50	0.39	0.27
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	632	10.78	0.18	0.15	0.12
East-West Road	7.0	5.4	3.8	952	10.78	0.72	0.55	0.39

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.4	6.7	5.3
50 Feet from Roadway Edge	6.3	6.5	5.2
100 Feet from Roadway Edge	6.2	6.3	5.1

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

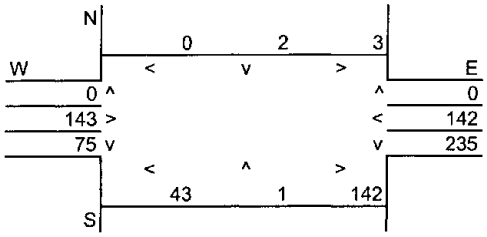
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

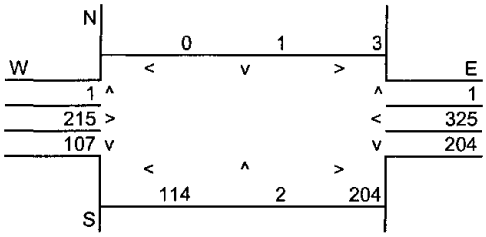
Intersection: 1st St./Atlanta Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	1st Street	At Grade	4	10	10
East-West Roadway:	Atlanta Avenue	At Grade	4	10	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	498	N-S Road:	632
E-W Road:	665	E-W Road:	952

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	498	10.78	0.14	0.12	0.09
East-West Road	7.0	5.4	3.8	665	10.78	0.50	0.39	0.27
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	632	10.78	0.18	0.15	0.12
East-West Road	7.0	5.4	3.8	952	10.78	0.72	0.55	0.39

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.4	6.7	5.3
50 Feet from Roadway Edge	6.3	6.5	5.2
100 Feet from Roadway Edge	6.2	6.3	5.1

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

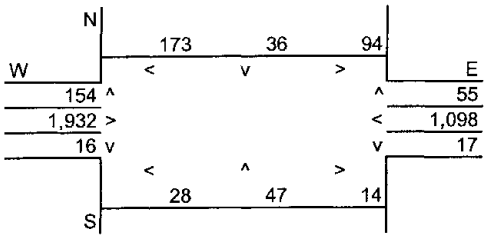
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

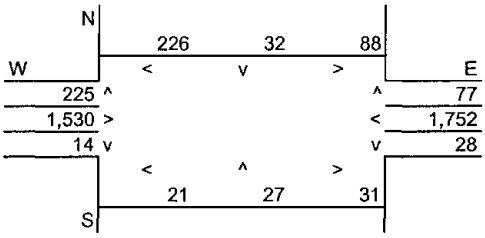
Intersection: 1st St./Pacific Coast Highway
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	1st Street	At Grade	4	15	15
East-West Roadway:	Pacific Coast Highway	At Grade	6	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	559	N-S Road:	675
E-W Road:	3,401	E-W Road:	3,768

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	559	7.30	0.11	0.09	0.07
East-West Road	6.1	4.9	3.5	3,401	7.30	1.51	1.22	0.87
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	675	7.30	0.13	0.11	0.08
East-West Road	6.1	4.9	3.5	3,768	7.30	1.68	1.35	0.96

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.4	7.6	6.0
50 Feet from Roadway Edge	7.1	7.3	5.7
100 Feet from Roadway Edge	6.7	6.8	5.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

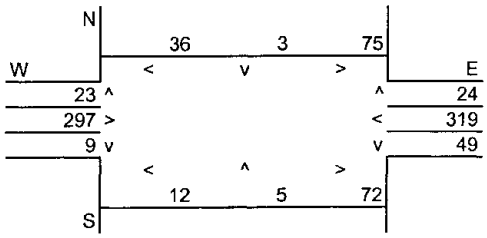
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

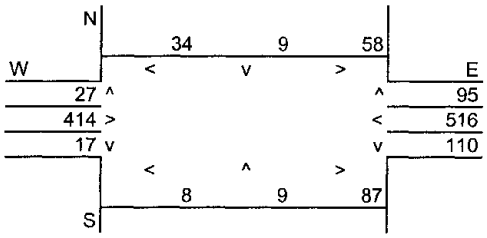
Intersection: Huntington St./Atlanta Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Huntington Street	At Grade	4	10	10
East-West Roadway:	Atlanta Avenue	At Grade	4	10	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	166	N-S Road:	240
E-W Road:	836	E-W Road:	1,280

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	166	10.78	0.05	0.04	0.03
East-West Road	7.0	5.4	3.8	836	10.78	0.63	0.49	0.34
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	240	10.78	0.07	0.06	0.04
East-West Road	7.0	5.4	3.8	1,280	10.78	0.97	0.75	0.52

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.5	6.8	5.4
50 Feet from Roadway Edge	6.3	6.6	5.3
100 Feet from Roadway Edge	6.2	6.4	5.1

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

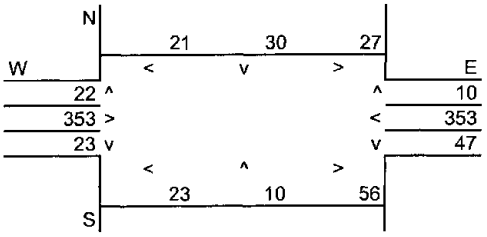
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

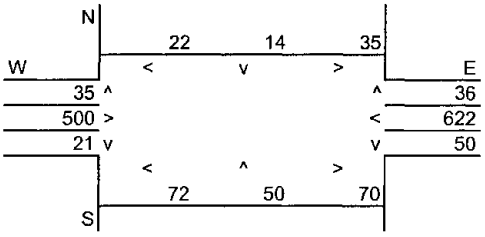
Intersection: Delware St./Atlanta Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Deleware Street	At Grade	4	10	10
East-West Roadway:	Atlanta Avenue	At Grade	4	10	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	189	N-S Road:	277
E-W Road:	846	E-W Road:	1,313

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	189	10.78	0.05	0.04	0.03
East-West Road	7.0	5.4	3.8	846	10.78	0.64	0.49	0.35
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	277	10.78	0.08	0.07	0.05
East-West Road	7.0	5.4	3.8	1,313	10.78	0.99	0.76	0.54

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.5	6.9	5.4
50 Feet from Roadway Edge	6.3	6.6	5.3
100 Feet from Roadway Edge	6.2	6.4	5.1

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

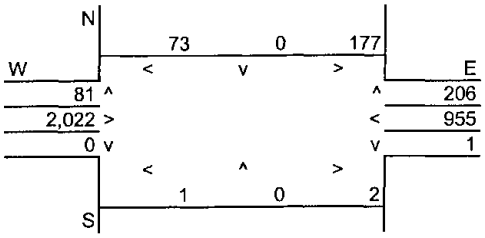
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

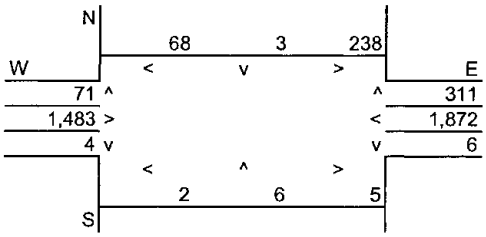
Intersection: Huntington St./PCH
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Huntington Street	At Grade	4	15	15
East-West Roadway:	Pacific Coast Highway	At Grade	6	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	537	N-S Road:	697
E-W Road:	3,363	E-W Road:	3,915

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	537	7.30	0.10	0.09	0.07
East-West Road	6.1	4.9	3.5	3,363	7.30	1.50	1.20	0.86
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	697	7.30	0.13	0.11	0.09
East-West Road	6.1	4.9	3.5	3,915	7.30	1.74	1.40	1.00

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.4	7.7	6.0
50 Feet from Roadway Edge	7.1	7.3	5.8
100 Feet from Roadway Edge	6.7	6.9	5.5

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

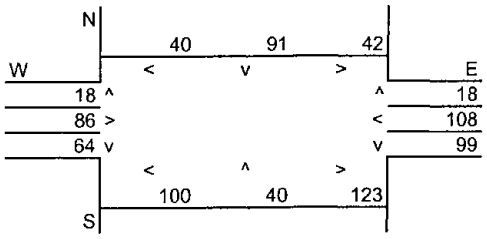
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

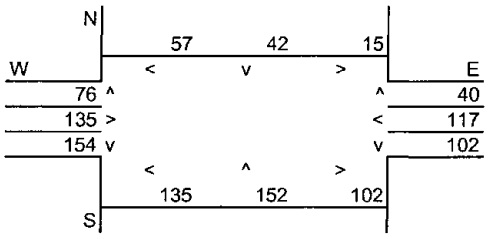
Intersection: Huntington St./Pacific View Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Huntington Street	At Grade	4	10	10
East-West Roadway:	Pacific View Avenue	At Grade	2	10	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	517	N-S Road:	687
E-W Road:	476	E-W Road:	674

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	517	10.78	0.39	0.30	0.21
East-West Road	2.7	2.2	1.7	476	10.78	0.14	0.11	0.09
P.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	687	10.78	0.52	0.40	0.28
East-West Road	2.7	2.2	1.7	674	10.78	0.20	0.16	0.12

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.3	6.5	5.2
50 Feet from Roadway Edge	6.2	6.4	5.1
100 Feet from Roadway Edge	6.1	6.2	5.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

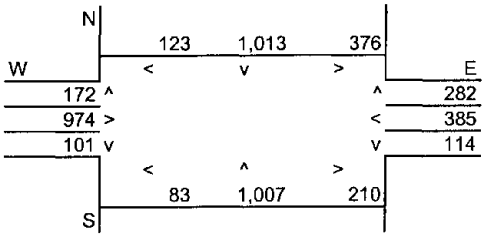
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

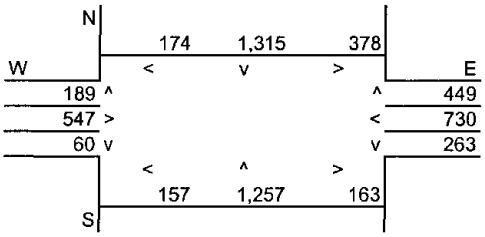
Intersection:	Beach Blvd./Adams Ave.
Analysis Condition:	Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	15	15
East-West Roadway:	Adams Avenue	At Grade	4	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	2,973	N-S Road:	3,762
E-W Road:	2,341	E-W Road:	2,530

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	2,973	7.30	1.32	1.06	0.76
East-West Road	2.6	2.2	1.7	2,341	7.30	0.44	0.38	0.29
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	3,762	7.30	1.68	1.35	0.96
East-West Road	2.6	2.2	1.7	2,530	7.30	0.48	0.41	0.31

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.6	8.0	6.2
50 Feet from Roadway Edge	7.2	7.6	5.9
100 Feet from Roadway Edge	6.9	7.1	5.6

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

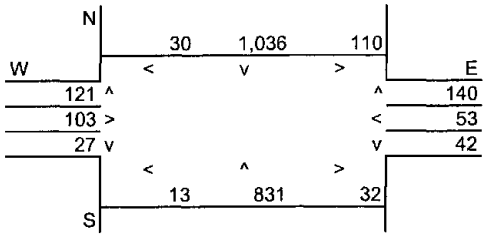
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

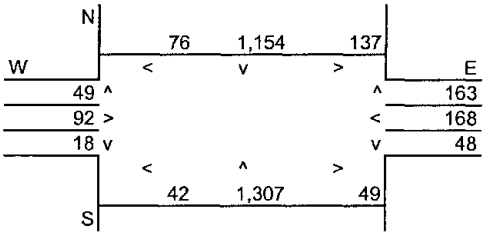
Intersection: Beach Blvd./Indianapolis Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	20	20
East-West Roadway:	Indianapolis Avenue	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	2,268	N-S Road:	2,886
E-W Road:	480	E-W Road:	657

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	2,268	5.52	0.76	0.61	0.44
East-West Road	2.6	2.2	1.7	480	5.52	0.07	0.06	0.05
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	2,886	5.52	0.97	0.78	0.56
East-West Road	2.6	2.2	1.7	657	5.52	0.09	0.08	0.06

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.6	6.9	5.4
50 Feet from Roadway Edge	6.5	6.7	5.3
100 Feet from Roadway Edge	6.3	6.4	5.1

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

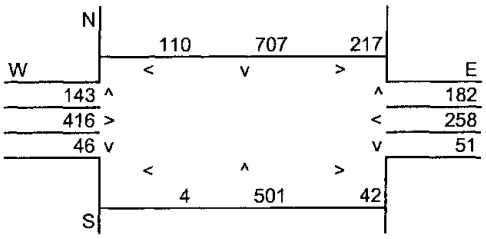
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

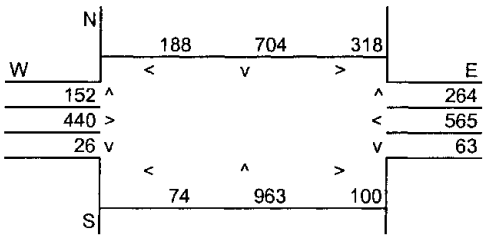
Intersection: Beach Blvd./Atlanta Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	20	20
East-West Roadway:	Atlanta Avenue	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,860	N-S Road:	2,589
E-W Road:	1,166	E-W Road:	1,750

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	1,860	5.52	0.63	0.50	0.36
East-West Road	2.6	2.2	1.7	1,166	5.52	0.17	0.14	0.11
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	2,589	5.52	0.87	0.70	0.50
East-West Road	2.6	2.2	1.7	1,750	5.52	0.25	0.21	0.16

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.6	6.9	5.5
50 Feet from Roadway Edge	6.4	6.7	5.3
100 Feet from Roadway Edge	6.3	6.5	5.2

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

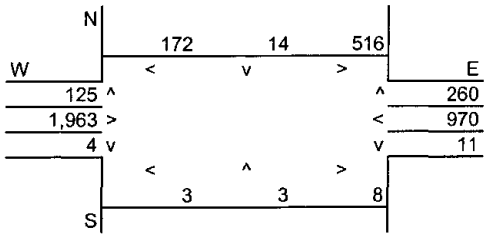
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

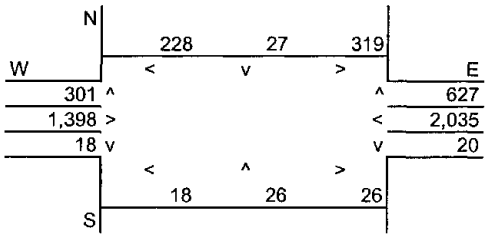
Intersection: Beach Blvd./PCH
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	15	15
East-West Roadway:	Pacific Coast Highway	At Grade	6	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,090	N-S Road:	1,528
E-W Road:	3,728	E-W Road:	4,425

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	1,090	7.30	0.18	0.16	0.14
East-West Road	6.1	4.9	3.5	3,728	7.30	1.66	1.33	0.95
P.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	1,528	7.30	0.26	0.22	0.19
East-West Road	6.1	4.9	3.5	4,425	7.30	1.97	1.58	1.13

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.6	8.0	6.3
50 Feet from Roadway Edge	7.3	7.6	6.0
100 Feet from Roadway Edge	6.9	7.1	5.6

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

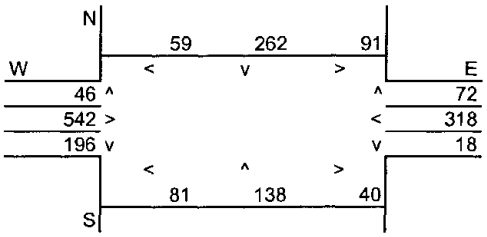
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

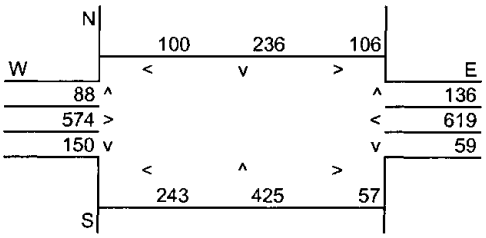
Intersection: NewlandSt./Atlanta Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	4	20	20
East-West Roadway:	Atlanta Ave.	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	735	N-S Road:	1,170
E-W Road:	1,242	E-W Road:	1,774

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	735	5.52	0.11	0.09	0.07
East-West Road	7.0	5.4	3.8	1,242	5.52	0.48	0.37	0.26
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	1,170	5.52	0.17	0.14	0.11
East-West Road	7.0	5.4	3.8	1,774	5.52	0.69	0.53	0.37

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.4	6.7	5.3
50 Feet from Roadway Edge	6.3	6.5	5.2
100 Feet from Roadway Edge	6.1	6.3	5.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

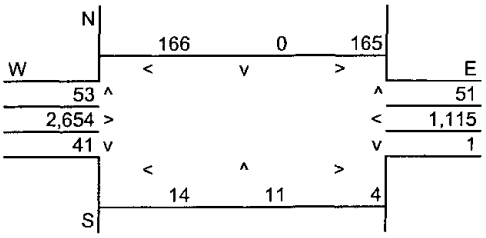
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

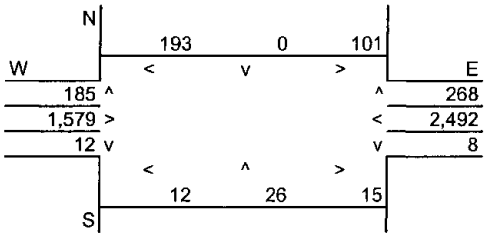
Intersection: NewlandSt./PCH
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	4	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	446	N-S Road:	773
E-W Road:	4,043	E-W Road:	4,473

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	446	5.52	0.06	0.05	0.04
East-West Road	6.1	4.9	3.5	4,043	5.52	1.36	1.09	0.78
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	773	5.52	0.11	0.09	0.07
East-West Road	6.1	4.9	3.5	4,473	5.52	1.51	1.21	0.86

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.2	7.4	5.8
50 Feet from Roadway Edge	6.9	7.1	5.6
100 Feet from Roadway Edge	6.6	6.7	5.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

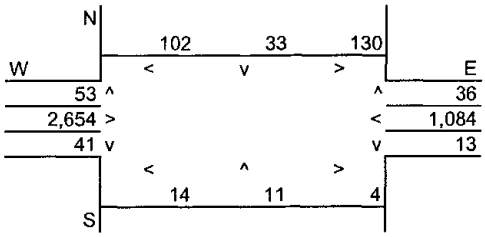
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

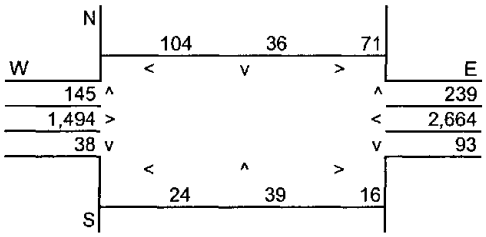
Intersection: Magnolia St./PCH
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Magnolia Street	At Grade	4	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	365	N-S Road:	634
E-W Road:	3,948	E-W Road:	4,577

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	365	5.52	0.05	0.04	0.03
East-West Road	6.1	4.9	3.5	3,948	5.52	1.33	1.07	0.76
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	634	5.52	0.09	0.08	0.06
East-West Road	6.1	4.9	3.5	4,577	5.52	1.54	1.24	0.88

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.2	7.4	5.8
50 Feet from Roadway Edge	6.9	7.1	5.6
100 Feet from Roadway Edge	6.6	6.7	5.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

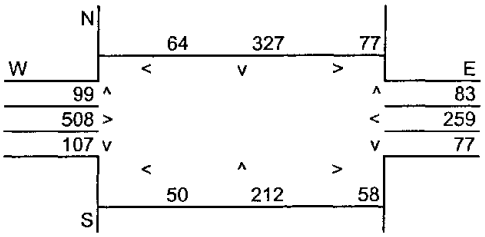
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

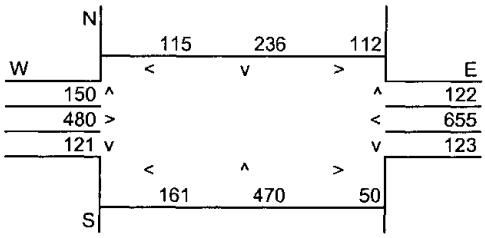
Intersection: Magnolia St./Atlanta Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Magnolia Street	At Grade	4	20	20
East-West Roadway:	Atlanta Avenue	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	862	N-S Road:	1,205
E-W Road:	1,087	E-W Road:	1,682

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	862	5.52	0.12	0.10	0.08
East-West Road	7.0	5.4	3.8	1,087	5.52	0.42	0.32	0.23
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	1,205	5.52	0.17	0.15	0.11
East-West Road	7.0	5.4	3.8	1,682	5.52	0.65	0.50	0.35

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.3	6.6	5.3
50 Feet from Roadway Edge	6.2	6.4	5.2
100 Feet from Roadway Edge	6.1	6.3	5.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

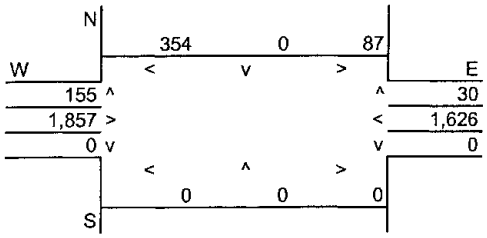
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

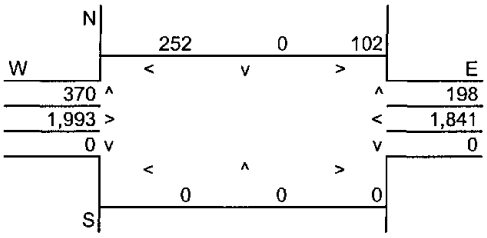
Intersection: PCH/Seapointe Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Seapointe Avenue	At Grade	4	20	15
East-West Roadway:	Pacific Coast Highway	At Grade	4	20	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	626	N-S Road:	922
E-W Road:	3,992	E-W Road:	4,456

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	626	5.52	0.09	0.08	0.06
East-West Road	7.0	5.4	3.8	3,992	5.52	1.54	1.19	0.84
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	922	7.30	0.17	0.15	0.11
East-West Road	7.0	5.4	3.8	4,456	7.30	2.28	1.76	1.24

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.4	8.3	6.4
50 Feet from Roadway Edge	7.1	7.7	6.0
100 Feet from Roadway Edge	6.7	7.2	5.6

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

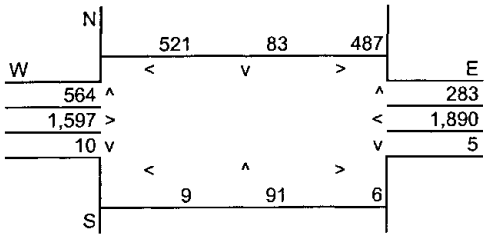
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

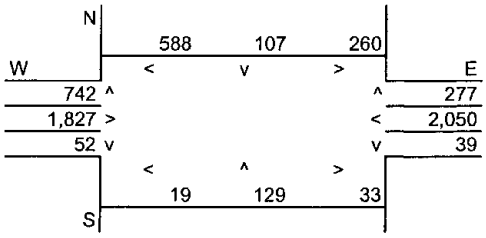
Intersection: PCH/Warner Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Warner Avenue	At Grade	4	10	10
East-West Roadway:	Pacific Coast Highway	At Grade	4	10	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	2,029	N-S Road:	2,103
E-W Road:	4,591	E-W Road:	5,278

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	2,029	10.78	0.57	0.48	0.37
East-West Road	7.0	5.4	3.8	4,591	10.78	3.46	2.67	1.88
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	2,103	10.78	0.59	0.50	0.39
East-West Road	7.0	5.4	3.8	5,278	10.78	3.98	3.07	2.16

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	9.8	10.4	7.9
50 Feet from Roadway Edge	9.0	9.4	7.2
100 Feet from Roadway Edge	8.1	8.3	6.5

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

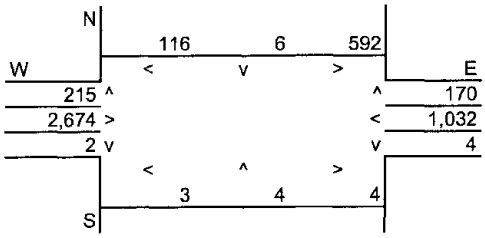
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

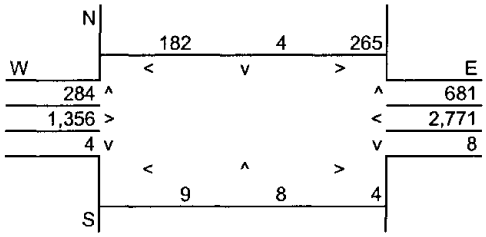
Intersection: PCH/Brookhurst St.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Brookhurst Street	At Grade	4	15	15
East-West Roadway:	Pacific Coast Highway	At Grade	6	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,103	N-S Road:	1,424
E-W Road:	4,476	E-W Road:	5,085

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	1,103	7.30	0.21	0.18	0.14
East-West Road	6.1	4.9	3.5	4,476	7.30	1.99	1.60	1.14
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	1,424	7.30	0.27	0.23	0.18
East-West Road	6.1	4.9	3.5	5,085	7.30	2.26	1.82	1.30

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	8.0	8.3	6.5
50 Feet from Roadway Edge	7.6	7.8	6.1
100 Feet from Roadway Edge	7.1	7.3	5.7

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

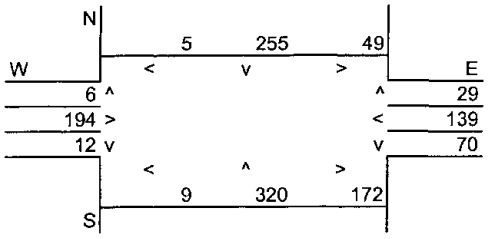
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

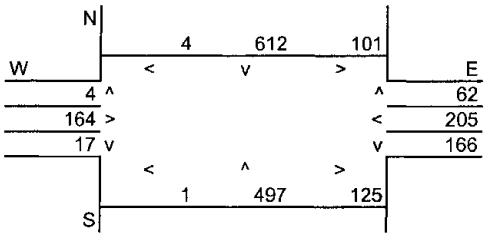
Intersection: Main St./Adams Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Main Street	At Grade	2	20	20
East-West Roadway:	Adams Avenue	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	838	N-S Road:	1,418
E-W Road:	653	E-W Road:	823

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	838	5.52	0.35	0.26	0.19
East-West Road	2.6	2.2	1.7	653	5.52	0.09	0.08	0.06
P.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	1,418	5.52	0.59	0.45	0.31
East-West Road	2.6	2.2	1.7	823	5.52	0.12	0.10	0.08

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.2	6.5	5.2
50 Feet from Roadway Edge	6.1	6.3	5.1
100 Feet from Roadway Edge	6.0	6.2	5.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

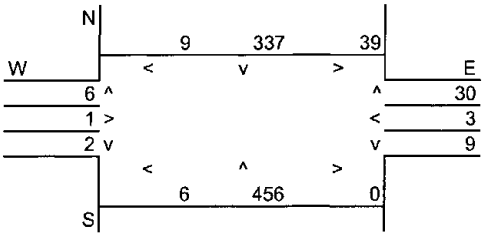
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

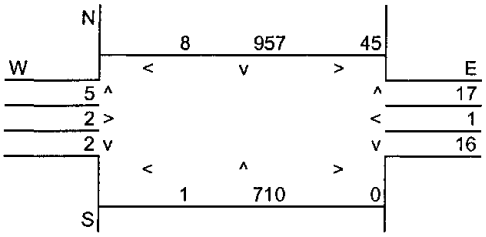
Intersection: Main St./Utica Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Main Street	At Grade	2	20	20
East-West Roadway:	Utica Avenue	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	877	N-S Road:	1,742
E-W Road:	82	E-W Road:	81

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	877	5.52	0.37	0.28	0.19
East-West Road	2.6	2.2	1.7	82	5.52	0.01	0.01	0.01
P.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	1,742	5.52	0.73	0.55	0.38
East-West Road	2.6	2.2	1.7	81	5.52	0.01	0.01	0.01

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.2	6.5	5.2
50 Feet from Roadway Edge	6.1	6.4	5.1
100 Feet from Roadway Edge	6.0	6.2	5.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

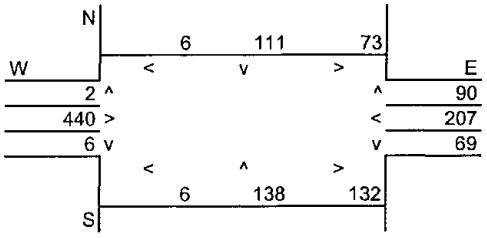
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

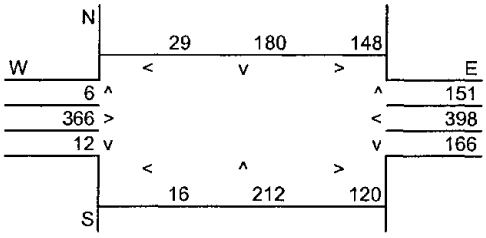
Intersection: Lake St./Adams Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Lake Street	At Grade	2	20	20
East-West Roadway:	Adams Avenue	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	462	N-S Road:	726
E-W Road:	1,011	E-W Road:	1,349

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	462	5.52	0.07	0.06	0.04
East-West Road	7.0	5.4	3.8	1,011	5.52	0.39	0.30	0.21
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	726	5.52	0.11	0.09	0.07
East-West Road	7.0	5.4	3.8	1,349	5.52	0.52	0.40	0.28

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.3	6.4	5.1
50 Feet from Roadway Edge	6.2	6.3	5.0
100 Feet from Roadway Edge	6.1	6.2	4.9

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

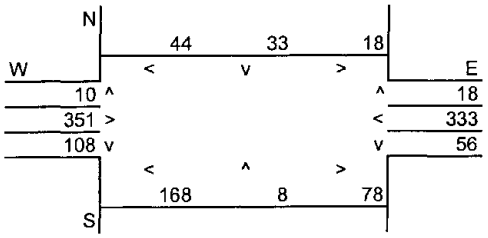
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

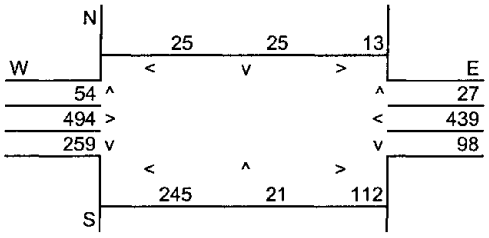
Intersection: Lake St./Yorktown Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Lake Street	At Grade	2	20	20
East-West Roadway:	Yorktown	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	451	N-S Road:	760
E-W Road:	1,014	E-W Road:	1,516

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	451	5.52	0.07	0.05	0.04
East-West Road	7.0	5.4	3.8	1,014	5.52	0.39	0.30	0.21
P.M. Peak Traffic Hour								
North-South Road	2.7	2.2	1.7	760	5.52	0.11	0.09	0.07
East-West Road	7.0	5.4	3.8	1,516	5.52	0.59	0.45	0.32

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.3	6.5	5.2
50 Feet from Roadway Edge	6.2	6.3	5.1
100 Feet from Roadway Edge	6.1	6.2	5.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

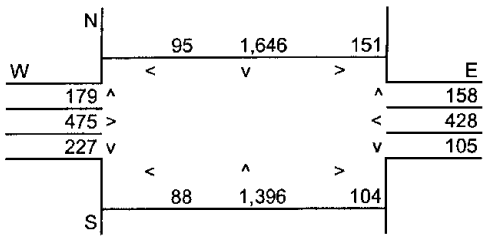
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

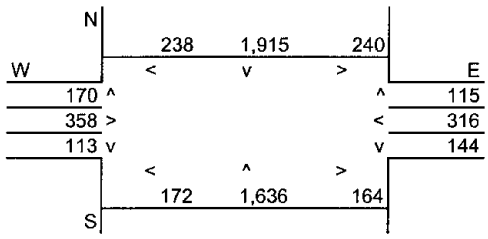
Intersection: Beach Blvd./Yorktown Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	15	15
East-West Roadway:	Yorktown Avenue	At Grade	4	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	3,625	N-S Road:	4,314
E-W Road:	1,492	E-W Road:	1,367

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	3,625	7.30	1.61	1.30	0.93
East-West Road	2.6	2.2	1.7	1,492	7.30	0.28	0.24	0.19
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	4,314	7.30	1.92	1.54	1.10
East-West Road	2.6	2.2	1.7	1,367	7.30	0.26	0.22	0.17

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.7	8.0	6.2
50 Feet from Roadway Edge	7.3	7.6	5.9
100 Feet from Roadway Edge	6.9	7.1	5.6

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

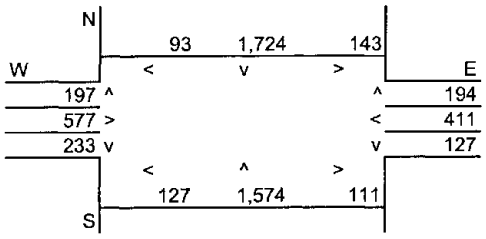
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

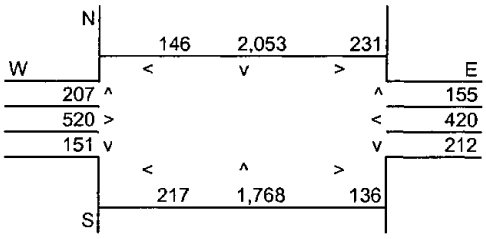
Intersection:	Beach Blvd./Garfield Ave.
Analysis Condition:	Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	15	15
East-West Roadway:	Garfield Avenue	At Grade	4	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	3,925	N-S Road:	4,560
E-W Road:	1,638	E-W Road:	1,674

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	3,925	7.30	1.75	1.40	1.00
East-West Road	2.6	2.2	1.7	1,638	7.30	0.31	0.26	0.20
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	4,560	7.30	2.03	1.63	1.17
East-West Road	2.6	2.2	1.7	1,674	7.30	0.32	0.27	0.21

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	7.9	8.1	6.3
50 Feet from Roadway Edge	7.5	7.7	6.0
100 Feet from Roadway Edge	7.0	7.2	5.7

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

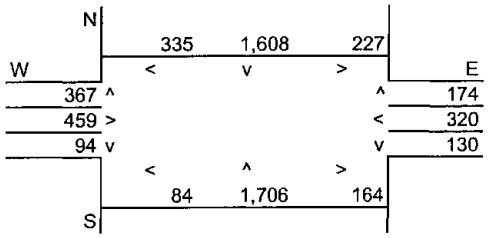
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

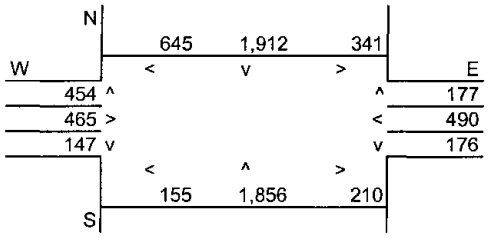
Intersection: Beach Blvd./Ellis Ave.-Main St.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	15	15
East-West Roadway:	Ellis Avenue - Main Street	At Grade	2	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	4,417	N-S Road:	5,385
E-W Road:	1,659	E-W Road:	2,356

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	4,417	7.30	1.97	1.58	1.13
East-West Road	2.7	2.2	1.7	1,659	7.30	0.33	0.27	0.21
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	5,385	7.30	2.40	1.93	1.38
East-West Road	2.7	2.2	1.7	2,356	7.30	0.46	0.38	0.29

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	8.1	8.7	6.7
50 Feet from Roadway Edge	7.6	8.1	6.3
100 Feet from Roadway Edge	7.1	7.5	5.9

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

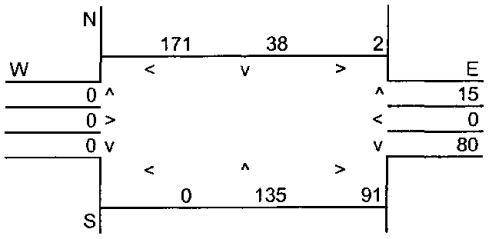
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

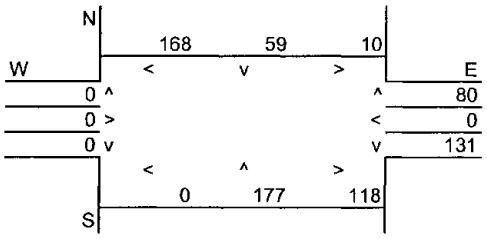
Intersection: 1st. St./Pacific View Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	1st. Street	At Grade	2	20	20
East-West Roadway:	Pacific View Avenue	At Grade	2	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	361	N-S Road:	494
E-W Road:	188	E-W Road:	339

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	361	5.52	0.15	0.11	0.08
East-West Road	2.7	2.2	1.7	188	5.52	0.03	0.02	0.02
P.M. Peak Traffic Hour								
North-South Road	7.6	5.7	4.0	494	5.52	0.21	0.16	0.11
East-West Road	2.7	2.2	1.7	339	5.52	0.05	0.04	0.03

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.0	6.1	4.9
50 Feet from Roadway Edge	5.9	6.0	4.8
100 Feet from Roadway Edge	5.9	5.9	4.8

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 10261-00
Project Title: Pacific City

Background Information

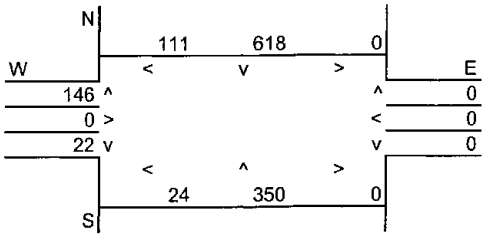
Nearest Air Monitoring Station measuring CO:	Costa Mesa - Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	5.8
Background 8-hour CO Concentration (ppm):	4.7
Persistence Factor:	0.7
Analysis Year:	2010

Roadway Data

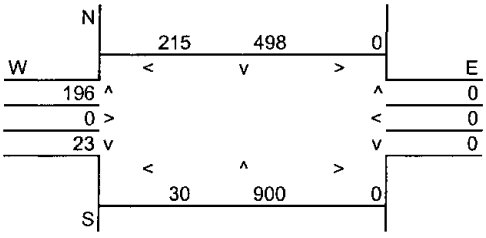
Intersection: Beach Blvd./Pacific View Ave.
Analysis Condition: Future Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	6	20	20
East-West Roadway:	Pacific View Avenue	At Grade	2	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,225	N-S Road:	1,809
E-W Road:	303	E-W Road:	464

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 Reference CO Concentrations 50 Feet	A_3 Reference CO Concentrations 100 Feet	B Traffic Volume	C Emission Factors[1]	Estimated CO Concentrations 25 Feet	Estimated CO Concentrations 50 Feet	Estimated CO Concentrations 100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	1,225	5.52	0.41	0.33	0.24
East-West Road	2.7	2.2	1.7	303	5.52	0.05	0.04	0.03
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	1,809	5.52	0.61	0.49	0.35
East-West Road	2.7	2.2	1.7	464	5.52	0.07	0.06	0.04

[1] Methodology and emission factors from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	6.3	6.5	5.2
50 Feet from Roadway Edge	6.2	6.3	5.1
100 Feet from Roadway Edge	6.1	6.2	5.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).